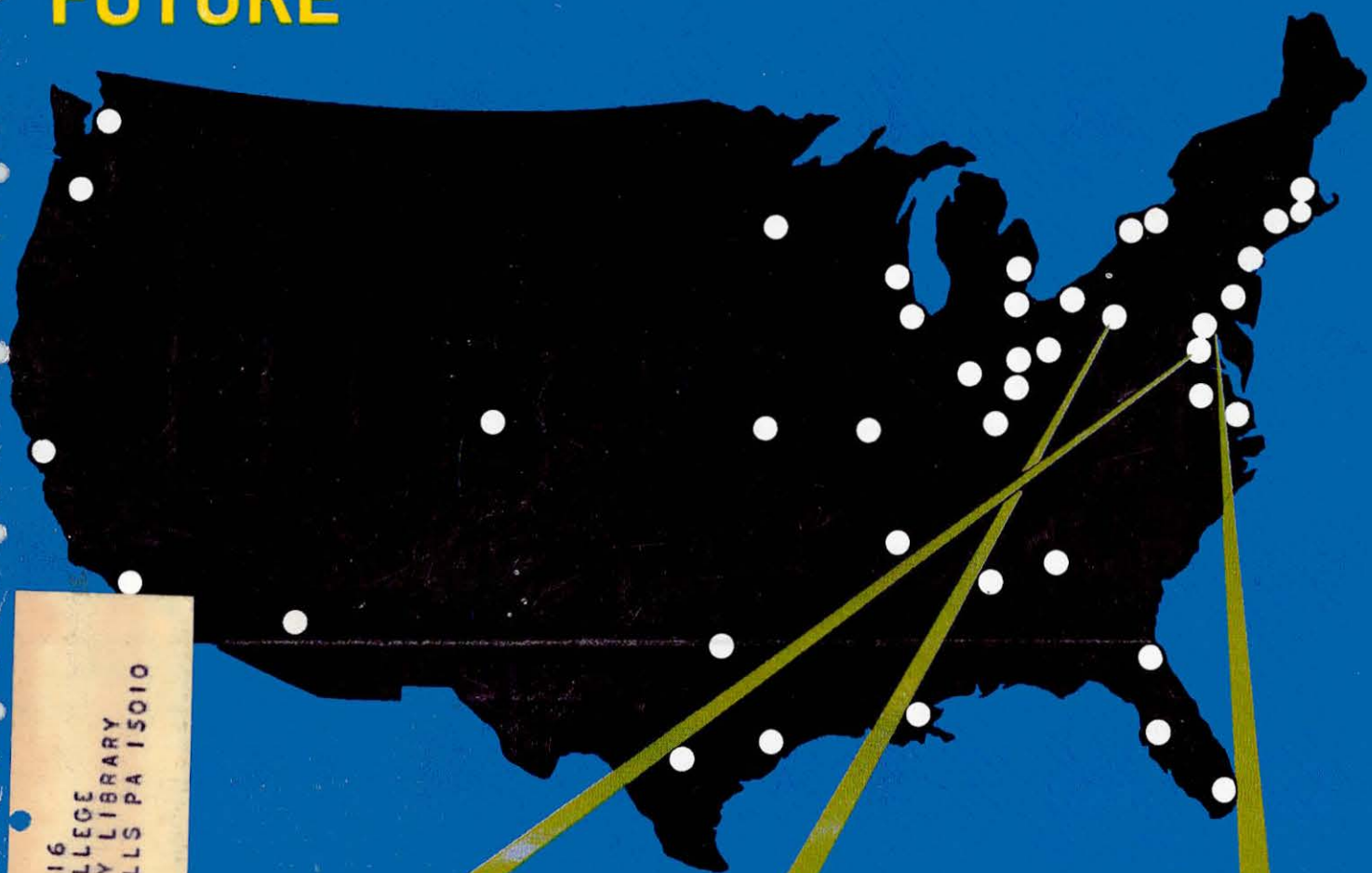
HOW COUPLED-IN-MOTION CAR WEIGHING CUTS COSTS p. 29

JANUARY 24, 1966

RAILWAY AGE
WEEKLY

MAPPING TRANSIT'S FUTURE



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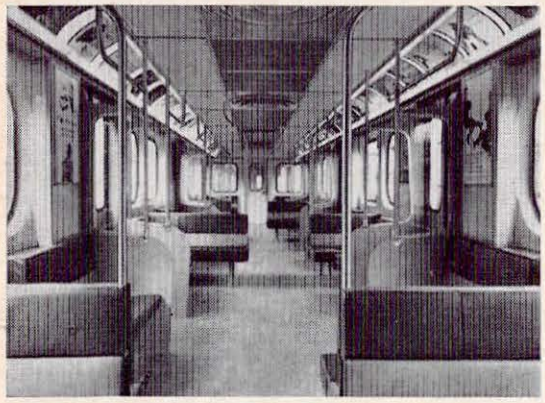

This is an interior view of the Toronto subway car. The seats are transversely and longitudinally mounted. Inside the car, glare-free, indirect lighting is provided by two rows of fluorescent light fixtures running the length of the side ceilings. The light is diffused through translucent lenses on which back lighted transparent car-cards can be displayed.

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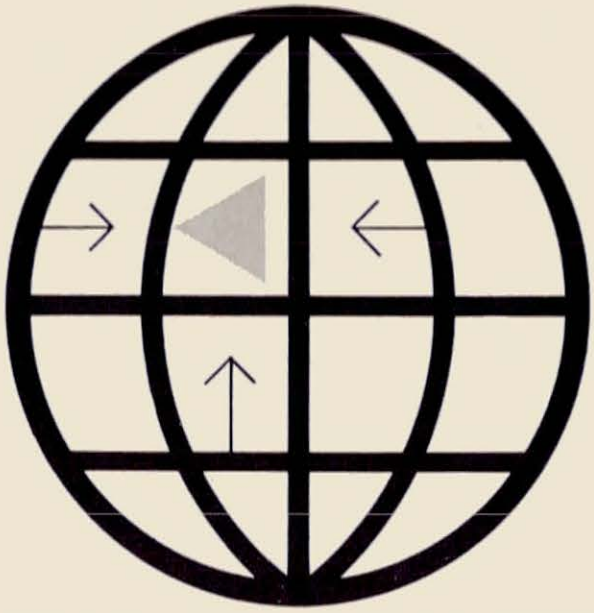

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RAILWAY AGE January 24, 1966 • Vol. 160, No. 3

THIS WEEK

MAPPING TRANSIT'S FUTURE

17 All eyes focus on Pittsburgh
Transit officials, government, business and labor leaders are converging on the city for a three-day biggest-ever meeting.

21 Kohl set for ATA as No. 2 man
The government's top transit expert moves over to the EVP slot at the American Transit Association next month.

22 Baltimore may go for mass transit
The city fathers are looking over a $292-million plan to satisfy local transport needs through 1985.

29 Why PRR likes to weigh cars on the run
A new automated facility at the Pennsy's Morrisville yards is helping to cut costs, errors, turnaround time.

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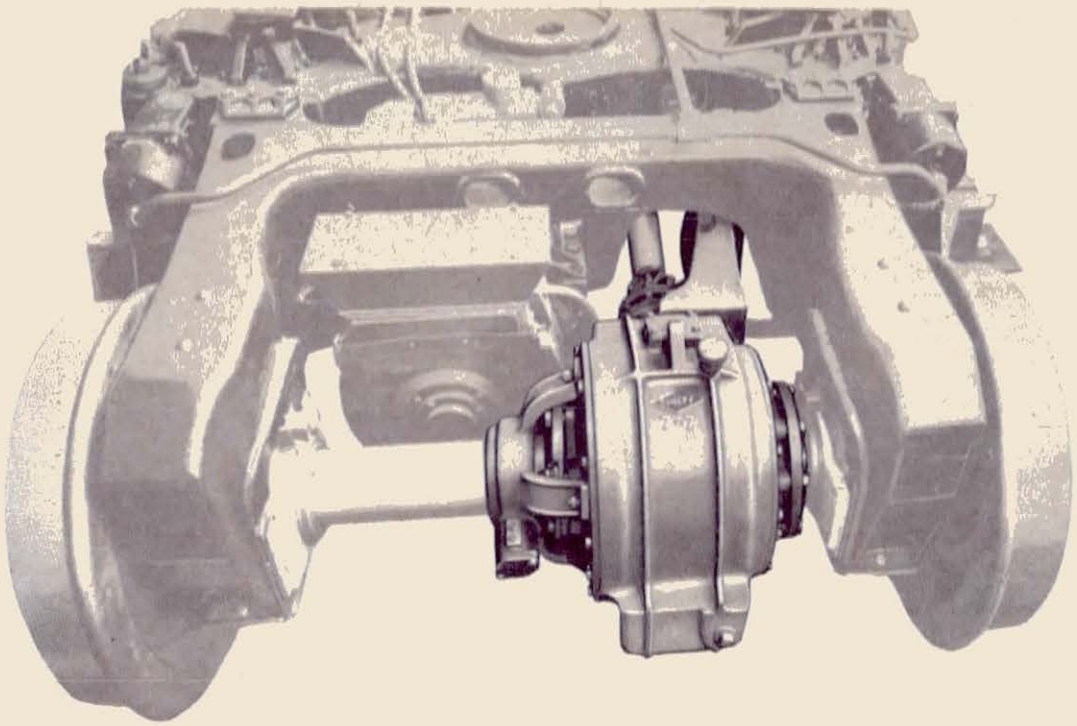
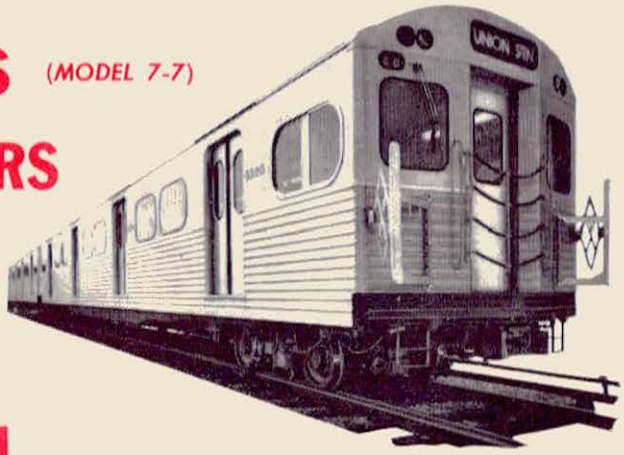


SPICER TRACTION DRIVES *(MODEL 7-7)* POWER NEW SUBWAY CARS FOR TORONTO TRANSIT COMMISSION



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SHORT AND SIGNIFICANT

REA realigns its operating, sales setup

REA Express disclosed last week a major realignment of its operating and marketing-sales territories across the nation to get better "on-the-spot" control of its services. Beginning Feb. 1, eight regions will be created out of the four regions that now cover the 50 states. Eight teams of regional vice presidents and general managers, assistant vice presidents and regional marketing managers, have been named to staff the areas. They will report directly to New York headquarters. REA President William B. Johnson said the new arrangement will permit greater operating efficiency and improved service, and will expedite communications.

●

Big industrial park planned by Pennsy

The Pennsylvania, which in recent weeks has shown new interest in increasing its activities in the green pastures of land development, such as in Florida and Texas, now has plans for a project closer to home. The Manor Real Estate Co., a subsidiary of the Pennsy, will develop a 616-acre industrial district in North Brunswick Township, N.J., adjacent to the road's four-track main line. PRR's Manager of Industrial Development Albert J. Rolleri said the possibilities of the New Jersey development offer encouragement for the development of similar districts throughout the 13-state Pennsy territory.

●

Southern orders locomotive controls

Southern last week turned to an electronics firm active in the U.S. space program to supply it with $1.3 million worth of locomotive control equipment. The Florida-based industry, Radiation, Inc., is a leading supplier to the Gemini, Saturn and Apollo space projects. Southern has been testing the units, called Locotrol (TM), for over a year, initially ordering 16 systems. They are used to provide synchronous, remote control of locomotive units in freight trains. Southern officers say the systems, which can control several diesels at once, offer the advantages of faster acceleration, improved braking, and smoother operation, resulting in less loss and damage to freight. Another major railroad soon is expected to start testing the Radiation equipment.

●

Transit-coordination study moves ahead

First phase of a study aimed at coordinating the San Francisco Bay Area's public-transportation facilities has been completed. The study, involving the interviewing of more than 250,000 patrons of two existing transit systems, is expected to aid in the detailed coordination of these facilities with the Bay Area Rapid Transit system now under construction. Recommendations will cover such areas as proposed routes and schedules for feeder bus lines serving the rapid-transit network; methods for handling passenger transfers; techniques and equipment for fare collection and apportionment of revenues, and possible new transit equipment designs. The $792,000 study is being financed in part by the Housing and Home Finance Agency.

●

Central welcomes EMD's new power line

The New York Central officially placed 50 of General Motors' 3,000-hp GP-40's into service in ceremonies at Grand Central Terminal, New York, on Jan. 12. The four-axle, four-motor locomotives, first production units of EMD's new line, are assigned to high-speed freight service between New York and Chicago. They have the new 645 series diesel engine, new ac-dc transmission, and a new traction motor, the latter with a new type of insulation permitting an increase of horsepower output to 750 per axle.

MONDAY MORNING REPORT

Transit R&D aids basic rail research, too

Rail research has always been important to transit systems. Advances in rail design, metallurgy, signaling and other systems have, generally speaking, quickly been reflected in transit operations. Railway suppliers are often transit suppliers—and in an ideal position to adapt rail advances to transit devices. Now, with transit development quickening by the day, there is strong evidence that transit system R&D is going to have an increasing effect on conventional rail operations, plant, equipment and systems.

BART test track starts to phase out

The San Francisco Bay Area Rapid Transit District's 4.5-mile test track near Walnut Creek, Calif., is a case in point. When the BART test track starts going out of business next month, it will have performed some elaborate, concentrated testing and development. More, in fact, than has ever been done before with rail equipment and track installations. Automatic train control tests will be completed in February. By May 1, propulsion and braking tests will be completed at the test track. By then, BART and dozens of suppliers will have data and answers that will be used not only for formulating the final shape of BART's 75-mile super transit system—but also for the super railroads that many industry leaders feel are going to be built in the years immediately ahead.

Need for R&D continues

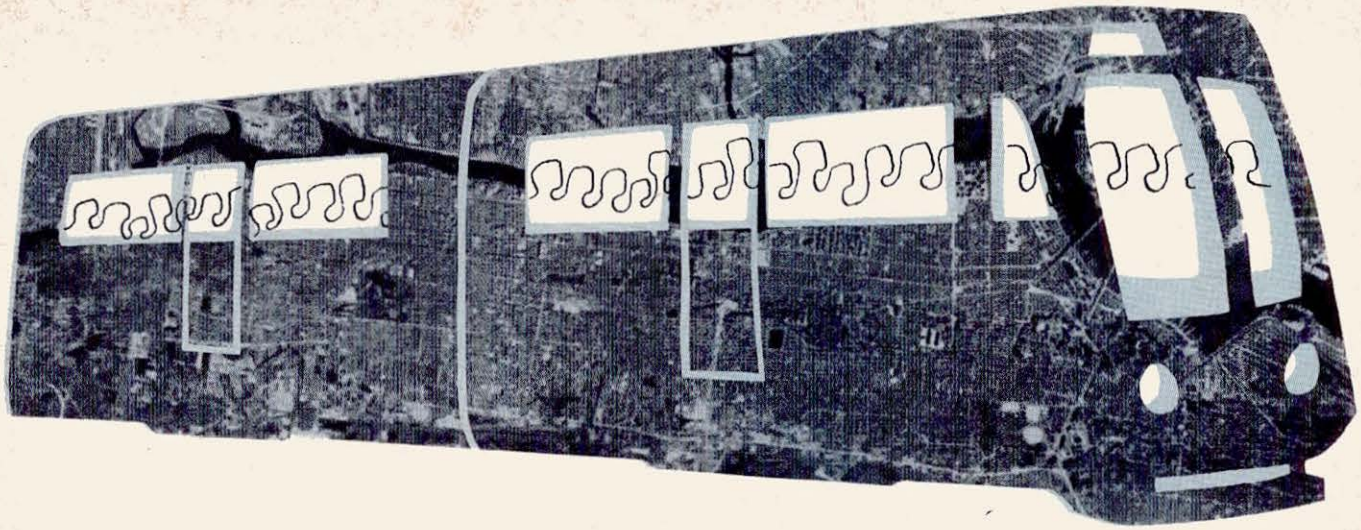
Some engineers and technicians, in fact, are unhappy that the BART test track is being phased out of existence. The rail-transit suppliers are spending a lot of money at the test track, money that has not only produced advanced instrumentation and recording systems but also a body of answers that have posed important new questions. Experts estimate that companies (General Electric, Westinghouse Air Brake, Philco, General Railway Signal, General Steel Industries, Pullman-Standard and others) have spent $2 or $3 for every dollar invested in the test track by BART and the Housing and Home Finance Agency. HHFA's test track investment runs to more than $7 million. The results will be highly visible, of course, when San Francisco gets its dazzling new transit system. Less visible, but of major importance to the railroads, will be a steady stream of betterments in track, ties, bridge design, wheel, automatic train control and equipment. In many, many ways the railroads will be reaping the benefit of work done at BART's test track for years to come. That is why, say some engineers and researchers, the test track should be kept going—preferably at some central location like Chicago.

Who would pay for it?

HHFA support for continued research and development would probably be a good bet in view of record transit-rail building or rebuilding plans for the next decade or two. Experts also feel the American Transit Association and the Institute for Rapid Transit would probably get behind such an effort. Manufacturers, faced with an unprecedented transit revival and a massive upgrading of the nation's rail network, would probably welcome and support a central test track operation for their R&D needs. The rail industry, through the AAR, could very well benefit from backing the project. It makes a lot of sense to a lot of rail and transit experts.

Basic questions need more time

BART's test track was planned to allow just enough time to gather the data and knowledge necessary to build San Francisco's super transit system. In view of the transit systems being planned in metropolitan centers throughout the country, the rebuilding of railroads that will be carried out in the next decade or two, the need for a test track facility such as BART's will be very great.



Probably:

In the next year or so, hundreds of thousands of people will be looking at, planning or voting for new rapid transit systems. Experts say these will be rail systems.

Good.

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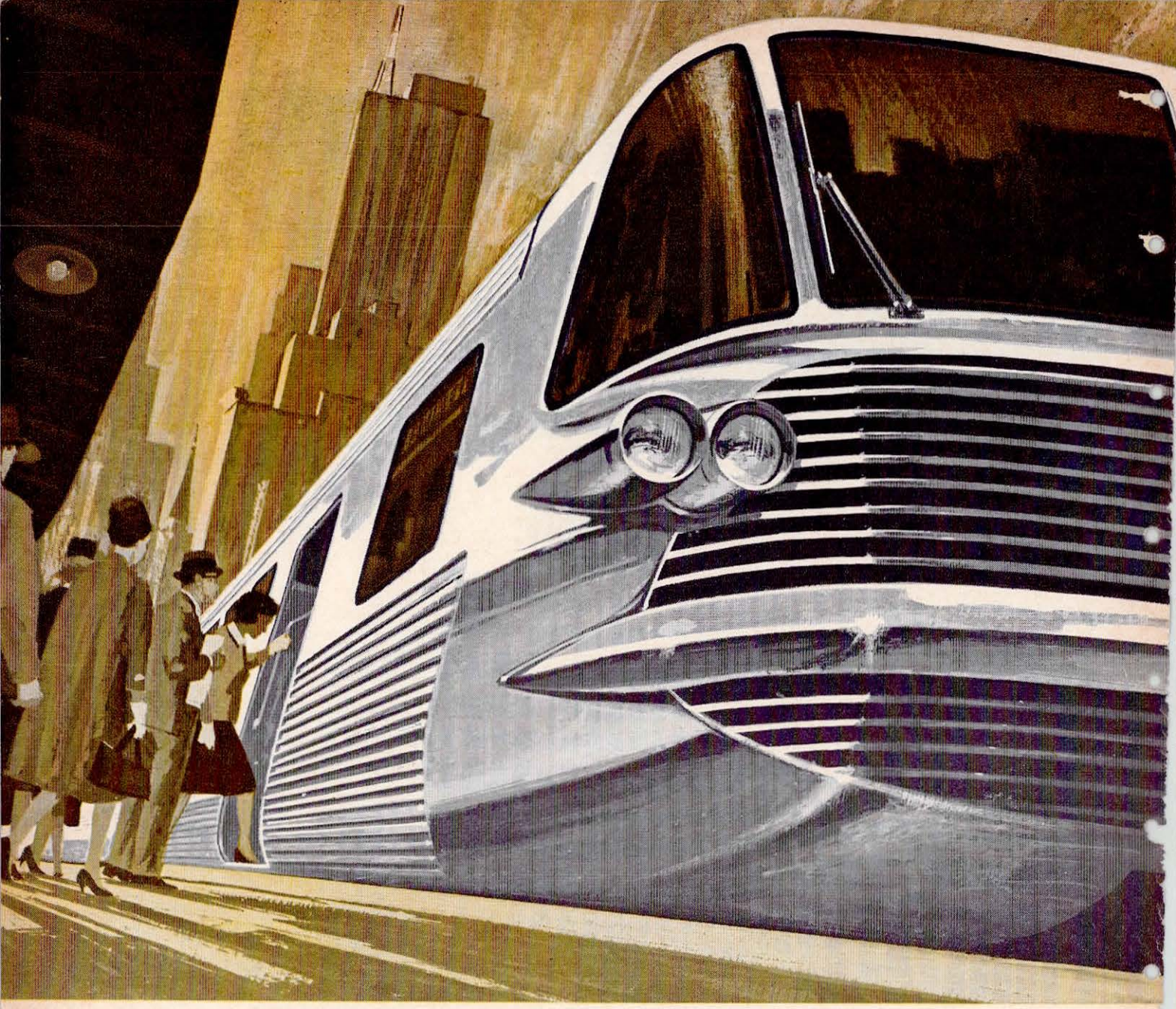

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WEEK AT A GLANCE

BLF&E asks for mediation on Fireman issue

Conferences held between the carriers and the BLF&E on the Firemen's Nov. 15 notices (asking for restoration of jobs, re-employment of firemen separated from service and the establishment of a training program for firemen) were "quite interesting" to BLF&E President H. E. Gilbert. So he has asked the National Mediation Board to assign mediators to assist BLF&E representatives in getting a "peaceful and lasting settlement to the diesel helper issue on six major railroads."

Noting that his organization's move was to "get the bargaining process moving, not to single out any group for crisis pressure," Gilbert said the BLF&E will seek to center bargaining efforts on the C&O, B&O, N&W, ACL, L&N, Santa Fe and the Pacific Lines of SP.

At a Washington, D.C. press conference Jan. 18, Gilbert said he had written to the presidents of the six roads, urging them to abandon the "crisis and compulsion" tactics of the National Railway Labor Conference, and said that his union had recognized in 1962 that "certain jobs demanded the services of a helper more criticaly than do others" and that "this is still the key to settling the issue."

In a blast at the railroads and the Brotherhood of Locomotive Engineers for the National Joint Board report issued recently, Gilbert said the report was based upon management-controlled surveys and studies, that the report was management-written, and then blistered the BLE for signing it.

Gilbert predicted the fireman issue will be settled "once we abandon public relations postures and get down to hard-nosed collective bargaining," but warned "if J. E. Wolfe [NRLC chairman] forces a national crisis then the Brotherhood is neither unwilling nor unable to react in kind."

Another railroad tries for the waterways

Missouri Pacific plans to file, probably later this year, for authority to operate as a water carrier on inland waterways within the railroads' service territory. The move would put a third rail-water case before the ICC—since both Frisco and a Kansas City Southern subsidiary have somewhat similar proposals pending. MP also indicated that, while its initial application will be restricted to present MP territory, it may be extended northward if MP control of Chicago & Eastern Illinois wins final approval. In any event, and whatever the extent of the proposal, stiff opposition can be expected from the waterways operators and their association.

Railroad employment continues to decline

Latest figures from the ICC's Bureau of Accounts put employment on Class I railroads (as of mid-December 1965) at 632,360— 1.93% below the year-age level and 0.19% below November 1965.

Employee Group	No. of Employees December 1965	% Change From December 1964	Change from November 1965
Executives, officials and staff assistants	14,905	+2.09%	−0.07%
Professional, clerical and general	135,084	−0.81%	−0.32%
Maintenance of way and structures ..	91,309	−0.47%	−2.82%
Maintenance of equipment and stores..	147,388	−2.02%	+0.37%
Transportation (other than train, engine and yard)	64,097	−5.04%	+1.89%
Transportation (yardmaster, switch-tenders, hostlers)	9,867	+0.42%	−0.74%
Transportation (train and engine service)	169,710	−2.74%	+0.14%

A boomlet in corridor studies

The Northeast isn't the only part of the country with a "corridor," and it's not the only part getting corridor-type high-speed studies. In Pennsylvania, they're talking of 150-mph rail service between Philadelphia and Pittsburgh. The state signed a contract with Louis Klauder & Associates for a preliminary look at the Philadelphia-Harrisburg segment; in the legislature, a $1 million appropriation to study the whole length is being considered.

Illinois' legislature created a Commission on High Speed Rail Transit. Presumably a link between Chicago and St. Louis gets a first crack, but according to General American's Deodat Clejan, a member of the new commission, the flat Midwest has it all over the East in any case, as a proving ground for high speed vehicles.

In Florida, the 150-mile "Gold Coast" stretches past Cape Kennedy. If local transport planners get their way, not all the rockets will be space-bound.

No letup in RI merger dispute

Hardly a midwestern or southwestern or western road has managed to stay out of the Rock Island merger-control scramble—and last week, one of the original combatants, Chicago & North Western, kicked off a formal campaign for public support by issuing a 30-page "analysis" of the various proposals involving RI. Meanwhile, western railroad men were pondering Missouri Pacific President Downing B. Jenks' suggestion that the time has come for a meeting of the minds in an attempt to untangle what has become an extremely complicated situation.

WATCHING WASHINGTON WITH WALTER TAFT

TAFT

THE RAILROADS are considering an industry position on President Johnson's call for legislation authorizing him to set up a Cabinet-level Department of Transportation. The call came in the President's State-of-the-Union Message to Congress.

In the same message, the President also made a couple of other recommendations of interest to the transportation industry. He said he would recommend a Highway Safety Act "to arrest destruction of life and property on our highways." And he wants legislation to deal with strikes "which threaten irreparable damage to the national interest."

A DEPARTMENT OF TRANSPORTATION would coordinate government activities in that field, the President said. He added: "The present structure—35 agencies, spending $5 billion yearly—makes it almost impossible to serve growing demands of the nation, or needs of the industry, or the right of the taxpayer to full efficiency and frugality."

THIS IDEA is not new. It has been advanced many times. And bills to implement it in different ways have been pending before Congress for several years. In the present Congress, they are sponsored by Republican members—Senator Clifford P. Case of New Jersey, and Representative J. Arthur Younger of California.

THE PRINCIPAL RAILROAD REACTION to the Presidential proposal is a disposition to wait until it is spelled out. This wait-and-see approach also appears to have been the initial reaction of truckers and water carriers. They, too, were meditating last week.

OPPOSITION will come from the National Industrial Traffic League on the basis of its present policy. That policy is against establishment of a transportation department in the Executive Branch of the government, and against transfer of any ICC functions to any Executive agency.

THE RAILROADS HOPE, meanwhile, that preoccupation with the proposal will not preclude a White House drive to implement what they consider more important pending Presidential proposals. Though not mentioned in the State-of-the-Union Message, these are the unrescinded calls, now four years old, for more rate-making freedom, and for adequate charges for use of publicly-provided transport facilities by water carriers, truckers and air carriers.

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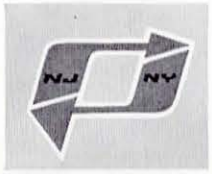

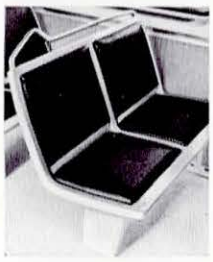

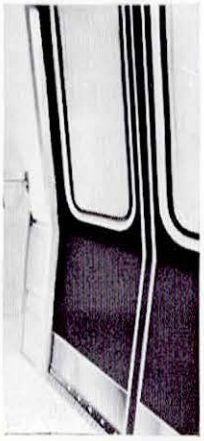

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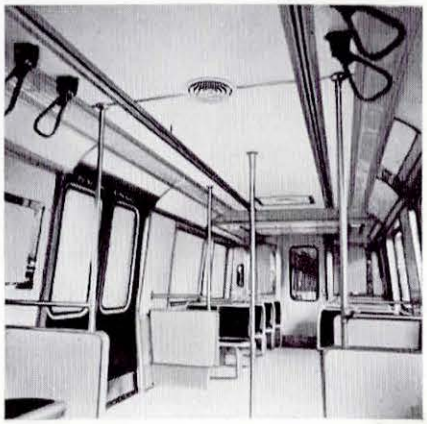

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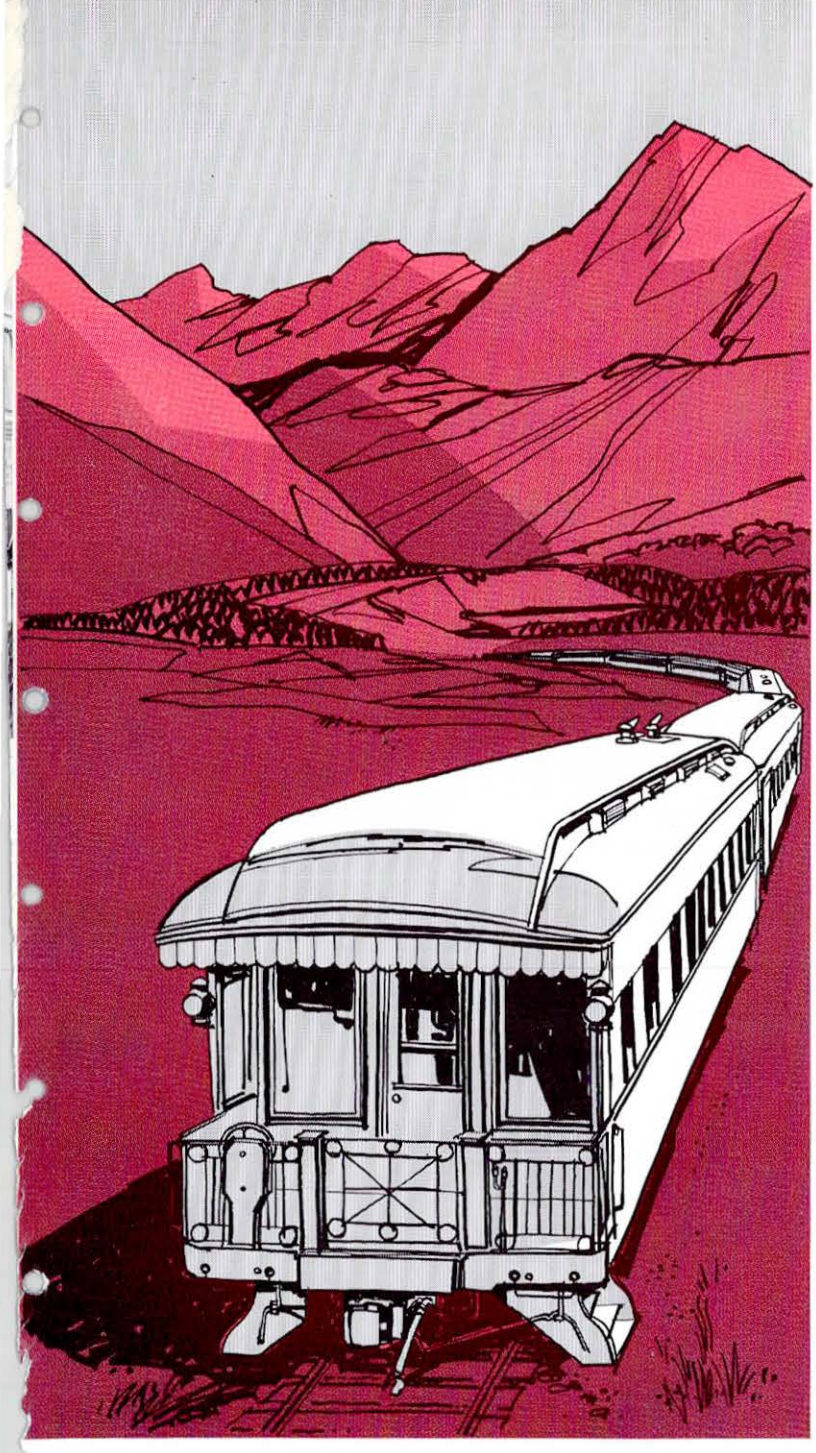

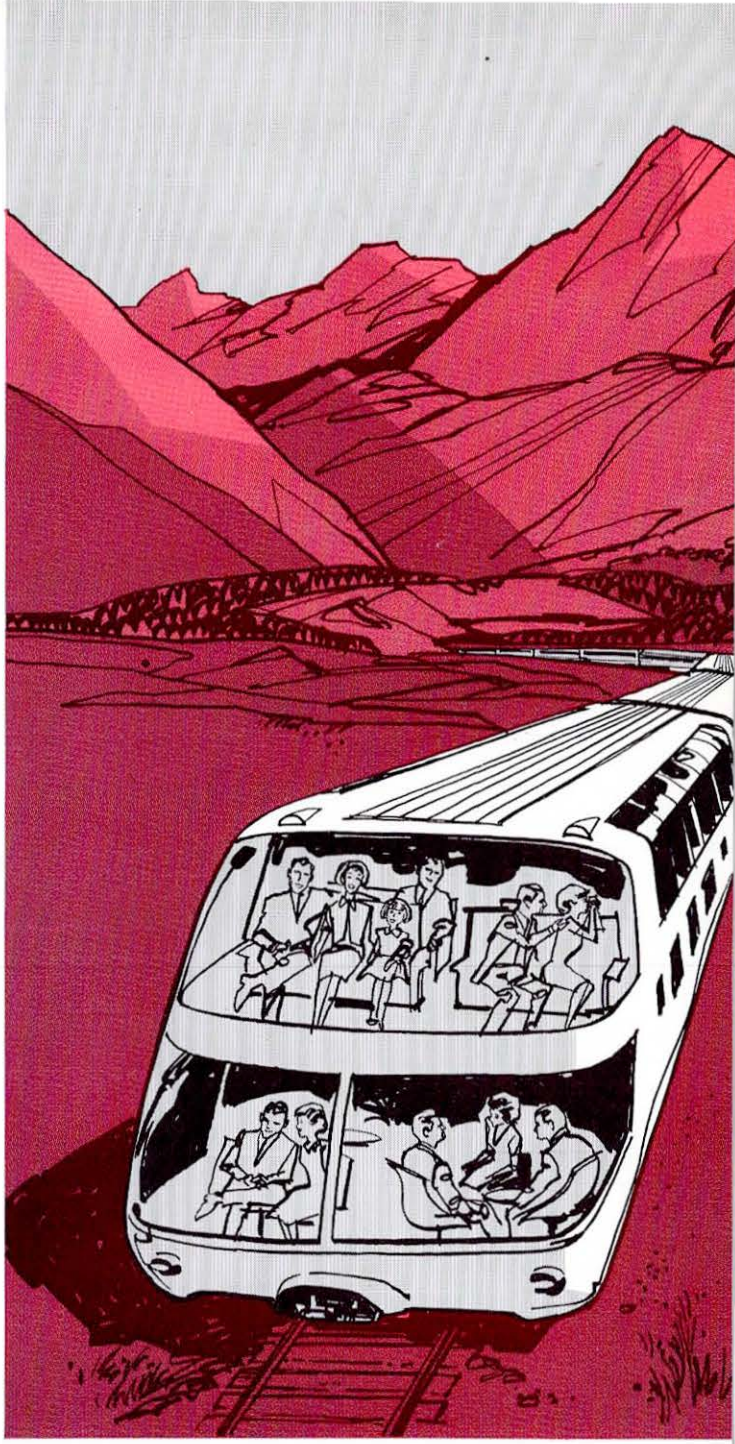

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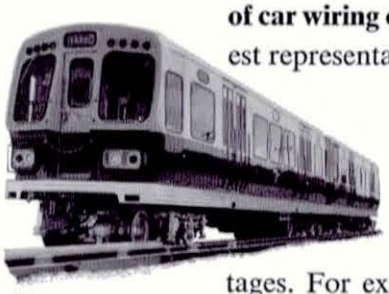

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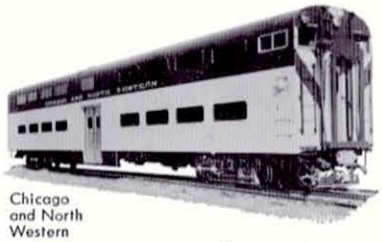

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PINPOINTING TARGETS: U.S. Steel's B. S. Chapple, Jr., leads conference planners in plotting 42 cities that may opt for transit. Others are (l. to r.) Pittsburgh Chamber's J. H. McLain, T. Mellon's J. Stanley Purnell, and Miss JoAnn Bundy.

MAPPING TRANSIT'S FUTURE

All eyes focus on Pittsburgh

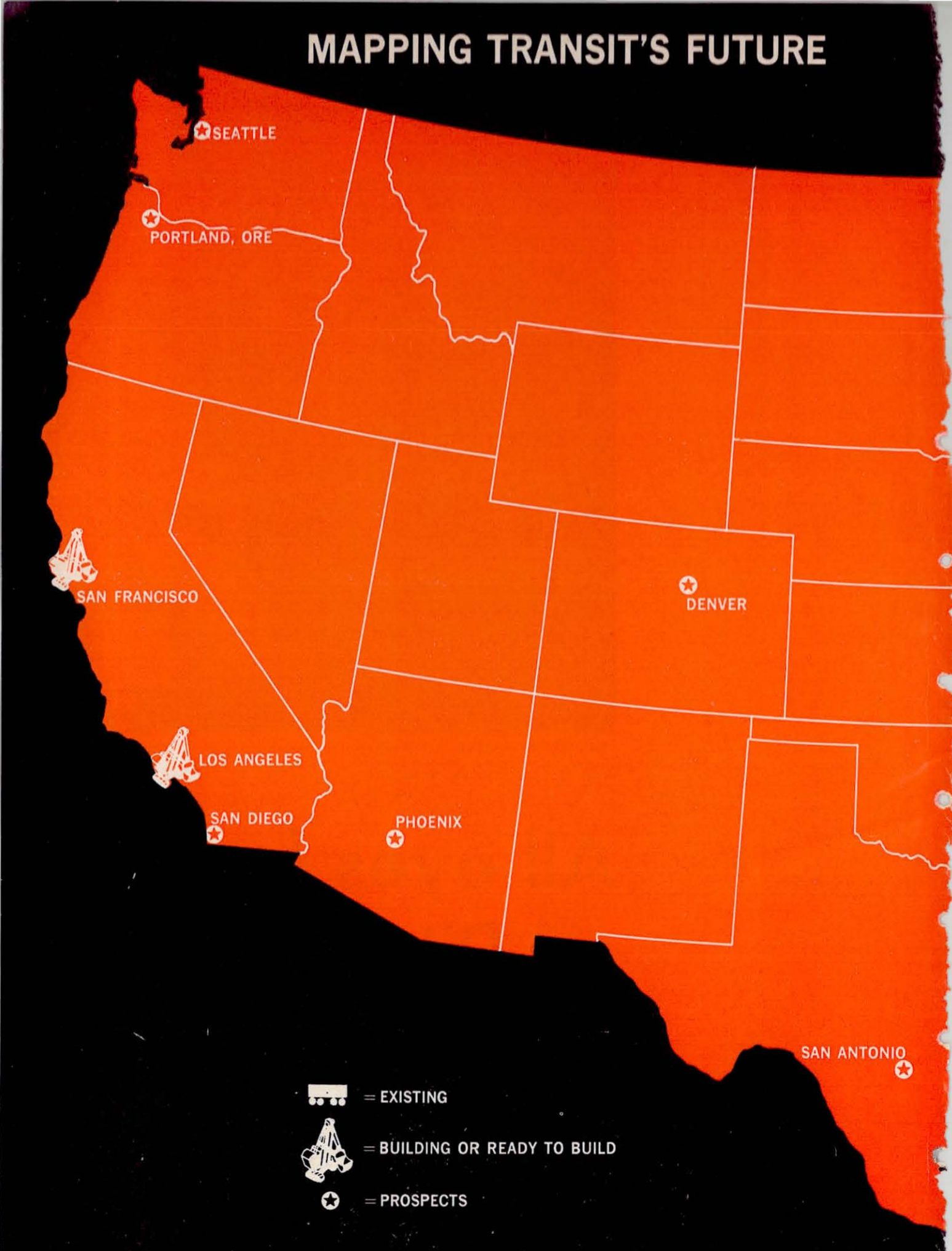
Urban transport planners from all over the world will gather in the Steel City next week for what will be the biggest —and most significant— meeting of its kind, ever.

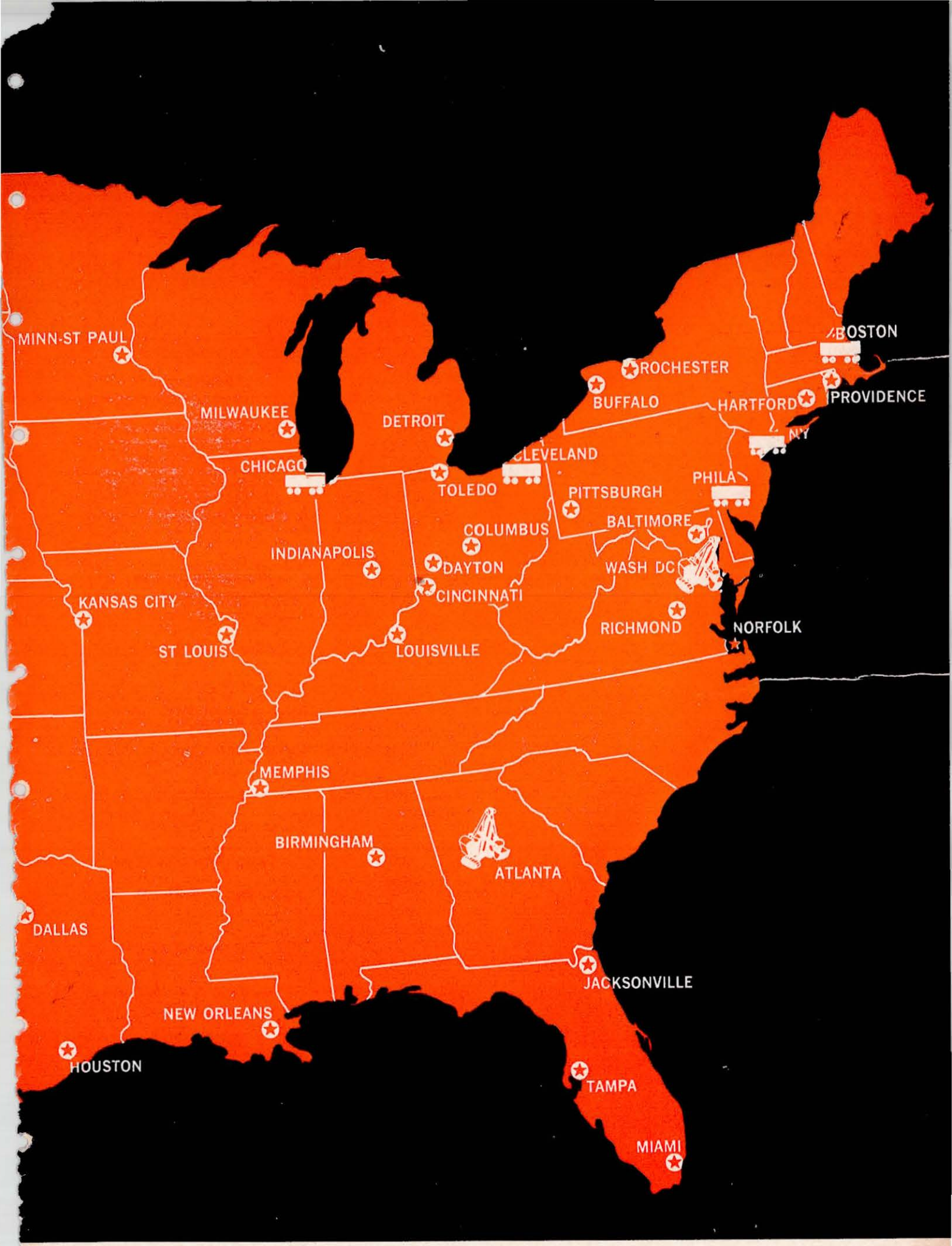
BY JOSEPH ASHER, TRANSIT EDITOR

What kind of a future does mass transit have? Come to Pittsburgh Feb. 1—3 and find out.

A week from now, about 1,000 transit officials, engineers, government planners, and transport experts will be gathering in the Steel City for a three-day conference on urban transportation, sponsored by the Chamber of Commerce of Greater Pittsburgh. The top men in the profession aren't there just to talk shop—they're on hand partly to celebrate one of the most dramatic reversals in transportation

MAPPING TRANSIT'S FUTURE

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Pittsburgh 'Council-of-War'

Planning the International Conference on Urban Transportation program are (from left): J. H. McLain, Executive Vice President, Greater Pittsburgh Chamber of Commerce; John W. Dameron, Executive Director and General Manager of the Port Authority of Allegheny County; G. W. Jernstedt, General Manager, Transportation and Industrial Equipment Division, Westinghouse Electric; G. R. Schaefer, Director, WABCO Mass Transit Center, Westinghouse Air Brake; Bennett S. Chapple, Jr. (Program Chairman), Administrative Vice President, U.S. Steel; R. H. Ryan, President, Regional Industrial Development Corp.; J. Stanley Purnell, Secretary and Assistant to the President, T. Mellon & Sons; Fred Close, Executive Vice President, Alcoa; William E. Howard, Senior Vice President, Mellon National Bank & Trust. Committee members not shown include Roger Ahlbrandt, Vice President and Assistant to the President, Allegheny Ludlum Steel; William Carpenter, Assistant to the President, Pittsburgh Plate Glass; Harry B. Clayton, Vice President, Corporate Planning and Marketing, Rockwell-Standard.

patterns the country has seen since the war.

During the late forties and early fifties, anyone asking what's in store for the transit industry would have gotten his answer delivered with a slow shaking of the head. Those were the days when small and medium-sized cities saw their trolley systems dying under them, bus systems by the dozen went out of business, and in the big cities, rail transit networks turned anaemic from lack of vital cash for updating and replacing equipment.

In the course of the sixties, doubts over transit's future were laid to rest, once and for all. Toronto and Cleveland proved that post-war-built systems could attract and hold patronage; New York, Boston, Philadelphia and Chicago woke up to the fact that mass transit was a vital asset that could not be allowed to go under; still other cities began building new systems.

So the question now is no longer whether there is a future for transit; rather it's a matter of deciding how high and how wide it's going.

Hence the Pittsburgh meeting. Industry pow-wows come hot and heavy the year round, but tend to be inbred, too lacking in a cross-section of outside opinion.

In Pittsburgh, they'll be doing it differently. The Urban Transportation Council of the sponsoring local Chamber purposely made it international in scope, to get the benefit of the best ideas kicking around the world, not just th's country. Leading transport officials from France, Britain, West Germany and Japan are slated to attend.

Second, the meeting won't just be another of those affairs where "we're talking to ourselves." It's hoped LBJ will be there, but at any rate some key decision-makers from Foggy Bottom will be up for the meeting; also one governor, one ex-governor, a U.S. Senator, the mayor of the host city, and the mayors of three other leading cities.

The same goes for top representatives of business and industry (firms based in the local area are going all out for the affair), labor, publishing, architecture, the scientific and academic world.

In one sense, the meeting is a kind of council of war for the industry. It's generally agreed that in the next few years, cities all over the country will be opting for mass transit. An informed estimate places the number of cities within the rapid-transit fold in the coming generation at 42 (see pp. 18-19).

Not all observers are that optimistic. Some place the figure at between 30 and 35. However, all these estimates may turn out to be far too low, in view of the population explosion, and the increasing urbanization of the country.

Once again, Pittsburgh is showing the way. The city consolidated 33 bus lines under one ownership, and recently engaged Parsons, Brinckerhoff, Quade & Douglas to undertake a 20-month mass-transit feasibility study.

Is there any doubt that rapid transit will make its appearance soon in Pittsburgh? According to Judge Loran L. Lewis, Board Chairman, and John W. Dameron, Executive Director, of the Port Authority of Allegheny County, it's a "must," if the city is to continue what is locally boosted as a "renaissance." As before, the question is not "will there be," but "when," "how much" and "where to."

● **The program.** Opening the conference on Tuesday, Feb. 1, will be an official welcome from Mayor Joseph M. Barr of Pittsburgh and conference chairman Dr. J. C. Warner, President Emeritus of Carnegie Institute of Technology. After opening remarks by Gen. R. K. Mellon, honorary conference chairman, objectives of the meeting will be outlined by J. Stanley Purnell, Chairman of the Urban Transportation Council of the Chamber of Commerce of Greater Pittsburgh. Council moderator will be U.S. Steel's Bennett S. Chapple, Jr.

Rounding out the morning meetings will be a talk, "Are Cities Obsolete?" delivered by James Rouse, President of Community Research and Development Corporation, Baltimore; and "A Tale of Four Cities," with Mayor A. J. Cervantes of St. Louis; Mayor Samuel Yorty of Los Angeles; Mayor James J. Tate of Philadelphia.

After a luncheon address by Time-Life Chairman Andrew Heiskell, Colin D. Buchanan of London's Imperial College of Science and Technology talks on the "Buchanan Report." "Intergovernmental Relationships" are discussed by Dr. William J. Ronan, Chairman of the Metropolitan Commuter Transportation Authority of New York; Dr. William D. McClelland, Chairman of the Allegheny County Board of Commissioners; and William R. Allen, Q.C., Chairman of the Municipality of Metropolitan Toronto. Moderating will be Charles A. Horsky, Advisor for National Capitol Affairs, The White House. The dinner that evening will be addressed by Pennsylvania's Gov. Scranton.

On the morning of Feb. 2, Robert Jenney, President of Jenney Manufacturing, moderates a meeting on "Urban Transportation—A Financial Dilemma." The panel for Part I, "Persuading the Public to Pay for Transit," includes Prof. Lewis M. Schneider of Harvard; Louis Jennings, Riggs Bank chairman; B. R. Stokes, general manager of the Bay Area Rapid Transit District. The Part II panel on "Financing Urban Transportation" includes Endicott Peabody, former governor of Massachusetts; Alan K. Browne, vice president of Bank of America; and John C. Kohl (see opposite).

A report will be delivered by Captain Koichi Hatagawa, of Japanese National Railways; and a discussion of the Corridor concept by Senator Claiborne Pell (D.-R.I.).

Richard Rice, Acting Director of Princeton University's Transportation Science Program, speaks on "High Speed Ground Transportation within the Realm of Today's Know-how." H. Guyford Stever, President of Carnegie Institute of Technology; Eric Walker, President of Pennsylvania State University, discuss the University's role.

Feb. 3 is windup day, with United Steelworkers President I. W. Abel to speak on the position of labor; a talk on "The Right Mix" by consultant Wilbur Smith and D. Grant Mickle Executive Director, Highway Research Board; "Transportation in 2000 A.D." by consultants Max Abramovitz, Peter Muller-Munk, Charles Luckman and M.I.T. Professor Charles Miller; and a final luncheon address by Fred C. Foy, board chairman of Koppers.

MAPPING TRANSIT'S FUTURE

Kohl set to join ATA as No. 2 man

Kohl

The industry association gets the government's top transit expert as its new executive vice president next month.

If any one man qualifies for the title, Mr. Mass Transit, it is John C. Kohl, the Federal Housing & Home Finance Agency's Assistant Administrator for Transportation. By turns educator, administrator, engineer, public official, Kohl has been responsible since 1961 for guiding the federal transit-aid program.

He is now getting ready to take on a new role: transit industry spokesman. American Transit Association President Edwin A. Claffey announced that Kohl has just been appointed ATA executive vice president, to succeed George W. Anderson, who retires this year. Kohl leaves the government to take up his new duties at the ATA Feb. 1—maybe.

"There is considerable doubt that I'll be able to finish up here and make the move by that date," he confessed last week. For one thing, he said, the HHFA is in the throes of transformation into the new cabinet-level Department of Housing and Urban Development, and "Doctor Weaver [Robert C. Weaver, present HHFA head and newly named HUD Secretary] has asked me to stay on, at least for a while."

For another thing, President Johnson in his State of the Union message proposed creation of a new Department of Transportation; whether such a department would take over mass transit programs is still not clear.

Finally, there is the call of home. "They still want me back in Michigan," Kohl smiled, recalling that in 1961, President Kennedy brought Kohl from the University of Michigan to Washington "for a couple of months" to help set up the mass transit demonstration projects authorized under the newly-passed Housing Act. Those months turned into years as the program grew in scope, culminating in 1964 in the Urban Passenger Transportation Act, which gave HHFA the task of supervising the award of capital grants to the tune of $375 million for aiding transit systems around the country.

● **Planning meant roads.** Kohl was the man who ran the program, and he pointed out just how far the industry has come in a comparatively short period. "Five years ago, there was no such thing as comprehensive planning. When an urban area was faced with the problem of combating traffic congestion, and the solution lay beyond local financial capacities, the only money available from the federal or state governments was for building highways —so all we got was new highways."

"What has happened since then," he went on, "is that we've provided the 'kitty' for an alternative. Local authorities have been given the opportunity to test and develop programs that embrace all modes of transportation, not just new roads—rail commuter lines, rail transit, buses, even ferries, as in the case of Puget Sound and some other areas."

Although the three-year capital grant program of the 1964 mass-transit law is

now at the half-way mark, the HHFA has been in no hurry to dispense big sums.

Kohl explained why: "This is not a federal giveaway program. It was conceived as a means of providing local transportation systems with 'seed money' for worth-while capital projects that could not be financed out of the farebox.

"Each proposed project must be shown to be related to an overall plan that coordinates all modes of transportation on a regional basis."

He cited a number of metropolitan areas that have qualified for capital grants just because that sort of planning is being done—Boston, Philadelphia, Cleveland among them.

As a good current example of how the program works, HHFA recently approved a $23 million capital grant to the New York City Transit Authority, matching local funds and enabling the local agency to purchase not 200 but 400 new cars, to replace rolling stock over 35 years old.

● **The future?** What lies ahead for Kohl at the ATA? "It would be premature to say," Kohl confessed, admitting that he'd have a much better idea when a full set of programs has been drawn up. He mentioned one possibility, though—more ATA initiative in disseminating new ideas throughout the industry, perhaps including sponsorship of academic seminars.

Asked about the possibilities for developing new technology that would revolutionize the industry, Kohl thought those who emphasize this at the expense of all other things were "overstating the case." He had no criticism to offer of the Department of Commerce's enthusiasm for developing new types of vehicles and propulsion systems for 1980, but thought "there are any number of things that can be done here and now to improve the situation in urban transportation."

Whatever the exact date of the move to the ATA, Kohl will be joining the 84-year-old industry association at a time when it is making an important move of its own: the organization has announced it will transfer its headquarters from New York City to Washington.

"Obviously," said Kohl, "one aspect of this move will be an improved opportunity to bring the industry viewpoint to the attention of public officials.

"On the other hand," he added, "it will prove no less valuable in exposing the ATA to the viewpoints of others—public officials, highway planners, urban development planners, and those involved in research."

Either way, John Kohl is sure to play a valuable role.

MAPPING TRANSIT'S FUTURE

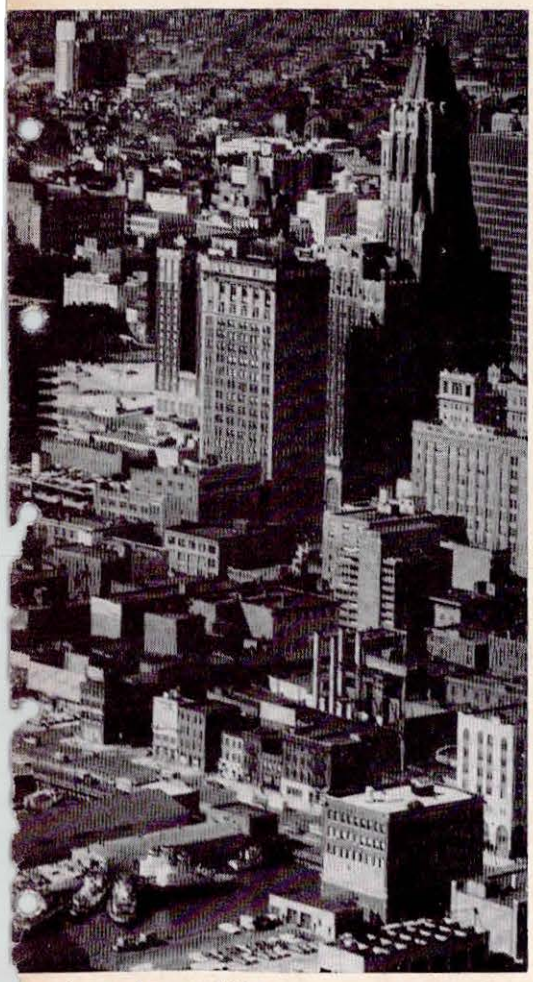
A revitalized port, downtown district and transportation go hand in hand, to keep Baltimo

Baltimore may go for mass transit

Civic leaders are interested in a $292-million plan for a combined bus-rail system, to take care of local needs through 1985.

Baltimore was a long-time holdout against the idea of mass transit—but the tune is changing fast. The City Fathers are mulling over a proposal for a $292-million system to meet the Chesapeake Bay port's needs through 1985.

Will the plan win through? So it appears, presently. Local reaction is reported mostly favorable to the findings of the feasibility study done by Parsons, Brinckerhoff, Quade & Douglas. According to Philip Heller Sachs, chairman of the newly-formed Metropolitan



growing and competitive.

Transit Authority, "At this early date, an on-time projection for accomplishment appears valid."

In the campaign to sell the American public on rapid transit, Baltimore is something of a pivot point. Of the great urban complexes in the Northeast Corridor, New York, Boston, and Philadelphia have all had rapid transit for many years. Washington, D.C. is now busy constructing a new system, which leaves only Baltimore still out in the cold—for the time being.

Moreover, Baltimore is large (metropolitan pop. 1.9 million), but not a mammoth like New York or Chicago. There are more big U.S. cities that it is comparable to; therefore, there may be more lessons to draw for the others.

The two-year engineers' study provided detailed analyses of why exclusive reliance on elevated busways, underground busways or commuter railroads cannot fill the bill for a region whose population will reach 2.7 million in 20 years. They narrowed their recommendations down to two—an all-bus system and a combined rail-and-bus system, then eliminated the former, saying that "The two express components together, rapid transit and buses on freeways, would provide excellent mass transportation to the year 1985 (approximately)."

The report has obvious interest for many U.S. cities comparable in size to Baltimore, and that are banking on similar growth in the next generation.

● **What's in the plan.** As it stands now, the plan calls for a combined rail-and-bus system with a capacity of 460,000 passengers daily by 1985. About two miles of exclusive busways would be built, with the bulk of expenditure ($275 million) concentrated on creating a 29.1-mile rail network. This would consist of an inner loop and two radiating lines to the north.

Heart of the rail system would be the 7.5-mile inner loop, all but .6 mile in subway, serving the central business district. There would be ten stations, with two main ones at St. Paul and Baltimore Streets, and at Lexington Street and Park Avenue.

The latter station is anticipated to be the focal point of the system, since it would serve the new Charles Center and the downtown shopping area. The consultants therefore recommended that the air rights above the station be used to create a bi-level plaza, both aesthetically pleasing and commercially attractive for shops, restaurants and offices.

Radiating out from the loop would be two other lines. The northwest line would extend 12.4 miles to Randallstown, six of them along the Western Maryland's right of way, and have seven stations. The northeast line would run 9.2 miles to Joppa Road, and have six stations.

Altogether, ten stations would be in subway, four at grade, and nine would be aerial, with all outdoor platforms canopied.

● **Air-conditioned cars.** Much can be expected of the rapid transit vehicles running on the system. About 160 will likely be required. Cars would be air-conditioned and incorporate late engineering and design features, presumably including automatic train control.

As in all new transit systems, a lot of emphasis is placed on providing adequate feeder facilities of all varieties: bus, park 'n ride, kiss 'n ride. On the northwest line, for example, there would be spaces for 5,400 automobiles, and on the northeast line, 4,000 parking places.

The consulting engineers listed some benefits that can properly be expected from the projected system:

—Rail transit lines would keep enough buses and autos off streets to permit express buses arriving from other corridors to circulate at reasonable speeds.

—The combined system would reduce future parking requirements in the core area, thereby preserving land for commercial redevelopment.

—Property values downtown would be sustained.

—The system would have reserve capacity to accommodate peak period traffic and some future patronage increases.

—It would focus population growth around stations, thus increasing transit ridership.

Once the capital is raised for constructing the system, it's anticipated that operating revenues will be able to cover operating and vehicle purchase costs. According to the consultants, "With its higher ratio of passengers to employees and its greater utilization of automation than is possible with an all-bus system, the combined system would provide greater stability of the revenue-to-cost ratio, in the light of past trends in productivity and salaries."

How long would the proposed system stay adequate? According to the engineers' report:

"Beyond 1985, however, the benefits accruing from a present decision to implement the rail transit plan would be even more compelling, due to the inability of existing city streets to accommodate ever-increasing volumes of bus and automobile traffic."

Their long-term recommendation: four more radial rail lines to be added, to meet the traffic needs of the post-1985 period. ■

Western Hemisphere's first automated urban mass transit system ...and he could run it

On April 28, 1967, the Montreal World Exhibition will unveil a new world wonder—an urban mass transit system so completely automated that an eight-year-old could boss the whole route. What's the heart of it? An integrated, highly sophisticated signal and control system designed and installed by WABCO's Union Switch & Signal Division.

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LINES ON LABOR

IT'S A RAID—One of the big continuing stories of 1965 in railroad labor was the story of the challenge and the defense, the attack upon contract-holders and the counter-attack. And, as 1966 gets under way, the organizations almost have to be asking themselves, "Was it worth it?"

During 1965, the Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen & Enginemen tested each other's strength. The big Brotherhood of Railroad Trainmen was both attacker and attackee in disputes with the smaller Order of Railway Conductors & Brakemen and the Switchmen's Union of North America. And after all the fights were over and all the votes were counted, who won? It's hard to tell. Representation rights for some few hundred men changed hands—but there were apparently few significant gains in dues-paying members registered by any of the ops.

WINNERS AND LOSERS—Chances are the BRT was involved in more representation disputes last year than any other operating union—more than a dozen cases, in all. The Trainmen won a few—Illinois Central, Texas & Pacific, Fort Worth & Denver, Erie Lackawanna. And they lost a few—Missouri Pacific, Grand Trunk Western, Chicago & North Western, Southern Pacific, Maine Central. Over-all, the won-lost record was not impressive, and the year ended on a somewhat sour note when the ORC&B won two votes on Tennessee Central, holding the conductors and taking over the brakemen from the BRT. For the engine-service unions, the story was much the same. The major battleground was IC and, after the BLF&E failed in an attempt to win representation rights for engineers, the BLE went after the firemen's contract and also lost.

CONTRACTS AREN'T MEMBERS—There's no doubt that a union benefits to some degree if it's able to take over a contract and thus extend its sphere of influence. ORC&B President George H. Harris, for example, says his union gained representation rights to 549 men via the election process in '65 and also managed an "over-all successful defense of our contracts" against challenges. Meanwhile, the BRT contends that, for all the elections, there may not have been an actual exchange of members exceeding a few hundred men. As the Trainmen see it, the various organizations could all have gained, as men who had held single membership became double-headers.

IS IT WORTH IT?—Sooner or later, the cost of raiding has to be considered. And it's not a small cost, although there's an understandable tendency on the part of both winners and losers to play this down. Normally, the big expense belongs to the challenger—with a top officer and a number of organizers assigned to the case, with special publications and mailings, with all the other expenses that go with what is essentially a political campaign. But the organization being challenged also has a sizeable financial burden to bear if it doesn't want to lose by default. By one estimate, a union challenging on a major railroad in an extended campaign may have an investment of $100,000 or more at stake when the votes are finally cast. Even if the contract is won and a good number of new members are added to the rolls, at present dues levels it would take decades for the new income to even approach the cost of the campaign. And that's one big reason why most observers look for a more cautious, more wary and less gung-ho approach to representational warfare as '66 unfolds. Both the BLE and the BLF&E seem now less inclined to push representation disputes (though they are involved in a certain amount of in-fighting in Canada). The same slackening of efforts can be expected from the train-service unions—although hangover disputes from 1965 may keep things humming for a while on several small properties and at least one big one, Great Northern.

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Every pound saved is worth $2...and Reynolds

Dead weight costs money. And the engineers of the Chicago Transit Authority know exactly how much. In asking for bids on their 180 new rapid transit cars, the CTA put a premium of $2 for every pound saved (under given maximum weight) by the builders.

Pullman-Standard, using an aluminum body construction, won the contract... on the basis of cost, and compliance with performance and *weight-savings* specifications. These are the first all-welded aluminum transit car bodies, and much of their aluminum was sheet and extrusions from Reynolds. They weigh 46,500 lbs., carry up to 125 passengers, are powered by four 100 hp. motors, and feature 10-ton air conditioning units in each car.

CTA engineers expect the weight savings provided by the aluminum body design to pay off every year, throughout the life of the car. They'll pay off primarily in power costs. Although the CTA put a $2

Chicago Transit Authority expects significant economies in power costs for every pound saved in weight of new cars made with Reynolds Aluminum.

Aluminum saves a "carload" in new rapid transit cars!

per pound premium on weight saved in the builders' specifications, they estimate actual savings in power will be more than $3 per pound over the life of the car.

In addition to contributing to the weight savings, aluminum extrusions also gave the designers extra flexibility, and provided more efficient production by combining two or more components into one.

For details about the use of strong, rust-free, weight-saving aluminum for any transportation or freight equipment, contact your local Reynolds office or write *Reynolds Metals Company, P.O. Box 2346-TM, Richmond, Virginia 23218.*

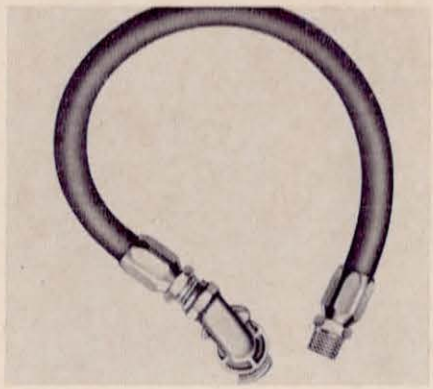
REYNOLDS
where new ideas take shape in
ALUMINUM

Watch **"The Red Skelton Hour,"** Tuesdays, CBS-TV

NEW **PRODUCTS** REPORT

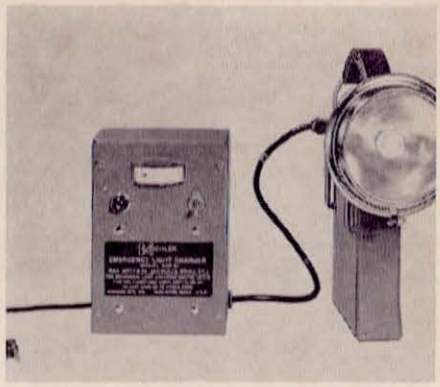
Battery Charger (RA-1)

The Terado Taperite Model 50-192 battery charger for 12-volt truck or trailer storage batteries charges average battery in 6- to 10-hr periods in the high switch position. In the low switch position, the charge rate starts high, then tapers to almost zero, so may be left on indefinitely. There is said to be no danger of overcharging. The charger turns on and off automatically. Water is added only when needed. *Terado Corp.*



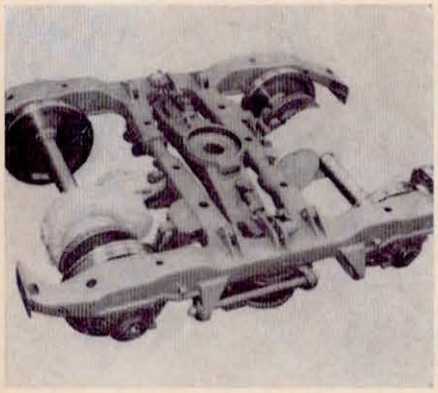
Air-Brake Hose (RA-2)

Aeroquip 2672 air-brake hose for service in the −65 deg F to +200 deg F range is recommended for working pressures up to 300 psi and is available in 1/2- through 1 3/8-in. ID sizes. The hose has a neoprene inner tube, wire-braid reinforcement and a synthetic rubber cover. It is available with a variety of male and female adapters and glad-hand fittings. The hose has been tested and proved under sub-zero conditions in Canada. *Aeroquip Corp.*



Emergency Lighting (RA-3)

The Model 250-G1 charger, coupled with Koehler's Model 130-GE rechargeable spotlight, lights automatically when power fails. When power is restored, it turns light off and recharges battery. Lantern has 7½ hr light per charge, rechargeable 500 times from complete discharge to full charge with transistorized charger. Indicator bulb glows when unit is connected; meter indicates state of charge. *Koehler Manufacturing Co.*



Transit Truck (RA-4)

The LMF truck delivered to the BART laboratory at Concord, Calif., where it is being given shop and shakedown tests at speeds up to 80 mph, is said to be the lightest of five being tested for the San Francisco-Bay Area transit service. Equalization of the truck is provided by diagonally spaced spherical bearings in the transoms. Other features include non-linear lateral suspension and capacity for high-speed curve negotiation. *Rockwell Manufacturing Co.*

Shop Spotter (RA-5)

The Shop Mule spotter is designed for moving and spotting all sizes of over-the-road highway trailers within terminals or industrial plants. It features automatic transmission, four-wheel power booster brakes with 590 sq. in. of brake lining, and power steering. All controls are beside the driver's seat. The front drive axle is a planetary drive system. *United Tractor, Inc.*

RAILWAY AGE
WEEKLY

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PLEASE SEND INFORMATION ABOUT PRODUCTS DESCRIBED ON PAGE 28 MARKED RA-1 RA-2 RA-3 RA-4 RA-5

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COMPANY .....

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1/24/66

☐ Please send information about subscribing to Railway Age

Why PRR likes to weigh cars on the run

Savings in time and money are some of the benefits of a new automated car-weighing facility.

RAILWEIGHT'S electronic computer is here displayed by Edward L. Rogers, vice president and chief engineer of the International Railroads' Weighing Corporation.

Railweight, a coupled-in-motion method of weighing freight cars, is saving money for the Pennsylvania. The computerized facility, developed by International Railroads' Weighing Corp., is installed in the PRR's Morrisville, Pa., yards.

● **Safer, too.** The facility has cut turnaround time for freight cars, reduced errors in weighing, and lowered per diem costs. Also, operations have been made safer because of the facility's ability to check end-to-end for overloads, with a consequent reduction in the possibility of hotboxes.

Total estimated cost of the installation was $189,000, including all grading and track work, according to W. G. Dorwart and his staff. Dorwart is PRR assistant vice president for freight services.

Here is how the facility operated during a recent observation:

In a scale house in the Pennsylvania's sprawling Morrisville yards, a trainmaster gave a yard crew the order to start moving a draft of loaded ore hoppers over the scale. A group of American, Japanese and Mexican operating officers and scale engineers looked on intently as a print-out machine went into action.

The printer recognized, but did not record, the passing of two diesel units over the scale. Then it began printing out gross weights as the cars rolled over a 12½-foot section of rail on the scale. As the printer continued to chatter, the letter "F" appeared after the weight of the fourth car.

● **Spots trouble fast.** The "F" signified a forward truck overload. Accordingly, the car was cut out before billing and classification and returned to the U. S. Steel Corp. ore dock for correction. If the rear truck had been overloaded, an "R" would have shown up on the print-out, and flagged the car the same way. If the car had been weighed on a conventional scale there would have been no indication where in the car extra material was located. The stenciled load limit might not have been exceeded, yet a potential source of trouble would have passed unnoticed. In the case cited, a chance of hotbox failure was eliminated, as was a source of premature wear and structural failure of wheels, springs, truck frames, track and bridges.

The PRR Railweight installation incorporates many features which make it a great improvement over IRWC's first scale. The first scale was installed in 1957 in the Monon's South Hammond, Indiana, yard (RA, Nov. 11, 1957, p.28).

The Morrisville installation copes successfully with such problems as:

—Weight transfer from adjoining cars through binding couplers.

—Varying car lengths.

—Disparity in truck designs.

—Effects of vibration.

For the first problem, special approach rails, including a small rise and decline forcing couplers out of alignment to a known degree, were designed. This worked well. Later, short retarder sections, were used, with equally good results.

● **Trucks weighed separately.** The solution to the second problem was to weigh each truck separately on a short scale, after eliminating the bind, and then add the weights of each. Trucks were found to have fairly uniform design. With quick reading and recording of each weight as trucks passed over the scale, incorporating a vibration filter, the truck-design-disparity problems were solved.

The Morrisville installation is completely automated and does not require attendance. A proximity sensor automatically switches power on in the system as a train approaches. It interrogates itself, verifying calibration and zero balance. If there has been a drift, compensation is made for the deviation. A symbol is then printed to the control point which, in this case, is in the agent-yardmaster's office some miles away, showing that all elements are functioning. Normally, all information is printed to this location for matching with light weights, rating and billing.

● **Speed limits.** A trackside signal is then given to the train crew to commence scaling. If the engineman exceeds 6 mph the signal will drop to amber; to red if he exceeds 6.95 mph, the speed limit for accuracy. If the speed limit is exceeded, a symbol will show on the print-out and corrective action can be taken. On the Monon installation, weighing speed was limited to 1½ mph.

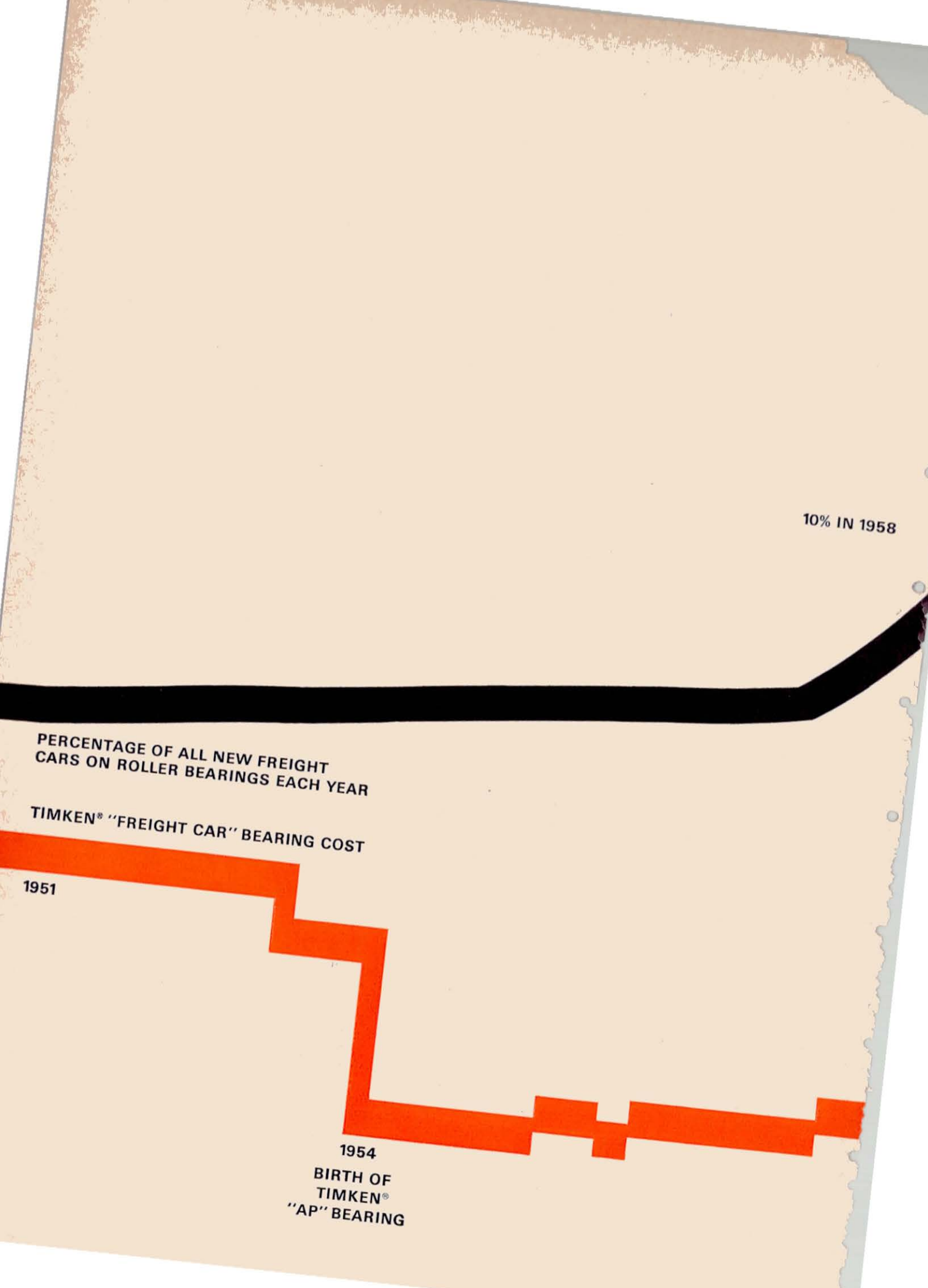
Sensors spaced along the rails will differentiate between locomotives and cars. As cars start passing over the scale, built-in strain gauges filter out vibrations, make an infinite number of readings as the truck is on the scale and then average them out. The gauges do the same for the second truck and then, in a fraction of a second, print the gross weight on the tape. The computer—which will accept car numbers and light weights—is compatible with any automatic car identification system.

The computer automatically recognizes the first truck of a car and pairs it with the second truck for a total weight. If a power failure occurs, thus missing a weight or weights, the computer will resynchronize automatically to pair the trucks. The computer and all related machines are automatically monitored. If a malfunction occurs, the print-out and control point are alerted as symbols appear on the print-out, where they remain until the all-clear symbol appears.

The computerized measuring system was developed by IRWC. Continuing tests were made on the Monon installation until any doubt as to its accuracy was eliminated. By 1962 IRWC was instrumental in inducing the Association of American Railroads to recommend to the ICC a change in the Commission's half-century-old weighing rules to permit weighing of freight cars coupled in a moving train, provided properly designed approaches and scales are used.

● **Other installations.** Following this development the Western Maryland

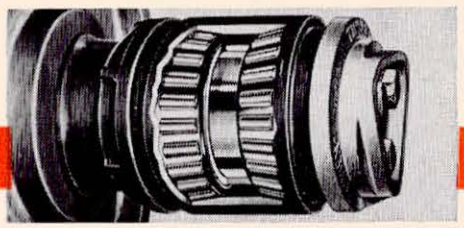
(*Continued on page 43*)


10% IN 1958
PERCENTAGE OF ALL NEW FREIGHT CARS ON ROLLER BEARINGS EACH YEAR
TIMKEN® "FREIGHT CAR" BEARING COST
1951
1954
BIRTH OF TIMKEN® "AP" BEARING

90% IN 1965

TWO TRENDS TO WATCH IN RAILROADING

The black bar represents the acceptance of "Roller Freight". The orange bar represents the cost of Timken® "AP" bearings, less now than when they were introduced in 1954. Timken bearing quality and service have always been high and will continue to remain so. This is the *original* tapered roller bearing that pioneered today's "Roller Freight" concept. Because of performance and reliability, it's now on over 200,000 freight cars in the U.S. and Canada. Before you buy another bearing, why not consult your Timken bearing sales engineer? He'll help you chart a more economical course. The Timken Roller Bearing Company, Canton, Ohio. Manufacturers of Tapered Roller Bearings, Fine Alloy Steel and Removable Rock Bits.

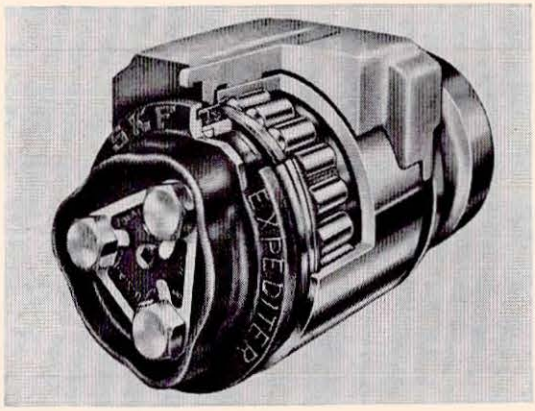


TIMKEN®
TAPERED ROLLER BEARINGS

1965

Circle 11 on reader service card

If you still buy tapered bearings after reading this, fine. But there is another answer.



"Another sales pitch," you're probably saying. True. But this one is different. We didn't take on just any product then try to sell it. We started out with only one premise: what's the best bearing for railroad cars?

(You see, Brake Shoe sells and services freight car roller bearings. We don't make them, so we had no axe to grind.)

Brake Shoe launched a series of exhaustive tests. Not only on existing bearings, but on experimental designs. After months of testing, it became clear one bearing was far superior to all others on the market: SKF's "G" design "Expediter"* with cylindrical rollers.

Our tests showed that SKF's "G" "Expediter" was more than just marginally better than highly regarded tapered bearings.

It actually outperforms tapered bearings in 7 important ways:

1. Takes up to 3½ tons more radial load.
2. Absorbs thrust without wedging action.
3. Allows higher operating speeds, yet runs cooler.
4. Lasts longer because there's less fatigue.
5. Easy-on, easy-off design. Whenever car is shopped, it permits removal, inspection and reassembly of bearings in ⅓ the time normally required for tapered bearings.
6. Prevents end-smearing of the raceways, thanks to sphered roller ends and angular contact flanges.
7. Has shrouded sealing that keeps grease in, dirt out.

Performance like this can save your company money and trouble. Before you invest, investigate SKF's "G" design "Expediter". Call your Brake Shoe representative. Or write for our "Expediter" booklet to:

Railroad Products Division

Abex

AMERICAN BRAKE SHOE COMPANY
530 Fifth Avenue · New York, N.Y. 10036

*A registered U.S. trademark of SKF Industries, Inc. "G" design "Expediter" sales and service by American Brake Shoe Company. 6570

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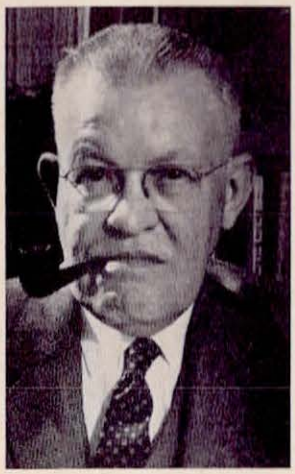
James G. Lyne, 1898-1966



James Garnett Lyne, 67, editor of Railway Age and chairman of the board of the Simmons-Boardman Publishing Corporation, died of cancer Jan. 16 at Sharon Hospital, Sharon, Conn. His funeral was held Jan. 19 in New Milford, Conn., close to his country home at Warren. Mr. Lyne also maintained a residence at 5 Peter Cooper Road in New York City.

He is survived by his wife, Louise Muller Lyne; their daughter, Nancy, who is in her senior year at McGill University, Montreal; and a son by a previous marriage, Thomas Lyne, of Westport, Conn.

Jim Lyne's death came as a surprise to many of his friends, so quietly had he fought his battle against the malignancy. Despite long periods of hospitalization, he remained alert and active. Only a few days before his death, he was dictating to a secretary, by telephone, from his hospital bed. He followed with keen interest developments in New York City's recent transit strike; one of his last acts as an editor was to sketch out an idea for editorial comment on the strike's implications for the transportation industry as a whole. To the end, he was not forgetful of what he considered to be the best interests of the industry he served for nearly half a century.

Born to railroading

Jim Lyne was born in St. Louis, Mo., on July 10, 1898, the son of a Chicago, Rock Island & Pacific conductor, and he spent his early years in Slater, Mo., and Herington, Kan. In 1920 he was graduated from the University of Kansas with an A.B. degree; 26 years later he won the degree of doctor of philosophy in economics at New York University.

At the age of 16 he was working as a laborer in the car department of the Rock Island at Herington, serving for 15 months in that capacity and as material clerk, timekeeper, file clerk, and, finally, as a clerk in the general roundhouse foreman's office at Kansas City. He served briefly in the Army during World War I, and worked during 1919 and 1920 as a special agent in the Bureau of Labor Statistics in Washington, D. C. In 1920 he embarked on a career in journalism as a reporter for the New York Daily News. In October of that same year he joined the editorial staff of Railway Age.

He rose rapidly—to financial editor in 1928; to assistant to the editor in 1938; to co-editor (with Samuel O. Dunn) in October 1947. He was named editor in 1949, and later that year was elected president of Simmons-Boardman. He became chairman of the board in 1958.

Recalling the day that Jim Lyne joined the company as "a very young associate editor," Sam Dunn wrote: "I very soon began to believe that he had an unusual combination of qualities that inevitably would win success for him. The quality that impressed me most was a good sense and sound judgment that were extraordinary in so young a man. Among other things he had, in addition to great industry, a taste for study, very unusual ability as a writer and editor, and a most friendly and engaging personality."

These same qualities impressed others, and Jim Lyne's celebrity—as an editor, as a transportation economist, as an articulate and forceful spokesman for the railroad industry—spread.

A Presidential appointee

He was appointed by President Eisenhower to the U.S. National Commission to the Pan American Railway Congress in 1953, and helped organize that year's Congress. He subsequently took a leading role in Congresses in Buenos Aires, Rio de Janeiro and Mexico City, as an official representative of the U.S. government.

Out of this association came Jim Lyne's conviction that railroading has become an international business—that railways the world over face essentially the same problems, and that the efforts of any one railway to solve those problems can be beneficially applied by all.

He served as chairman of the Federation for Railway Progress during the 1950's. From 1957 until 1964, he was director of commercial research for the Traffic Executive Association, Eastern Railroads, dividing his time equally between Simmons-Boardman's offices in downtown Manhattan and the TEA offices midtown. He was chairman of the E. H. Harriman Memorial Safety awards for several years, relinquishing that post only during his final illness. He took an active role in the affairs of the Railway Progress Institute, and was a member of the RPI's board of governors.

During the depression days of the early Thirties, when then-unregulated trucks and water carriers were taking traffic from the railways in wholesale lots, he helped to organize the Railroad Employee-Taxpayer movement, which played a leading part in obtaining equitable regulation of railway competitors.

He was a member of the Railroad Public Relations Association, the New York Railroad Club, the Ameri-

(*Continued on page 47*)

CORPORATE OFFICER: Board Chairman Lyne presides over a Simmons-Boardman directors' meeting. Clockwise, Mr. Lyne; A. J. McGinnis, president; George Dusenbury; John Thompson; R. G. Lewis; Duane C. Salisbury; William E. Russell, Jr.; Fred A. Clark (no longer on the board); William E. Russell, Sr.

EDITOR: At planning session with Publisher R. G. Lewis (foreground) and Editorial Director George Dusenbury.

EMPLOYER: At retirement ceremony honoring long-time colleague Elsie Tartas.

A MAN OF MANY PARTS

HEAD TABLE FIXTURE: With his friend of many years, John Barriger, now president of the Katy Railroad.

INTERNATIONALIST: With former AAR President W. T. Faricy, en route to Pan American Congress in Buenos Aires.

SAFETY AWARDS CHAIRMAN: Presenting an E. H. Harriman Memorial award to Felix Hales, then NKP president.

AFTER HOURS

AN ELOQUENT MAN—In these columns, each week, Jim Lyne spoke with eloquence and passion—and above all, with simplicity—for the idea to which he devoted a lifetime.

That idea—that passion—was railroading. With grace and wit, with profound insight cloaked in the homely idiom of his native Midwest, he defended and promoted the efficiency of the steel wheel on the steel rail.

His gentle, direct, and down-to-earth manner, nurtured on the prairies, magnificently survived a Ph. D. at New York University and 45 years of living in the East. He was equally at home talking shop with a track supervisor or discussing (in French) the complexities of world transport with his old and good friend, French Academician Louis Armand.

His written words are his monument; what follows is a sampling.

THE GIFT OF SIMPLICITY—Jim Lyne had no patience with gobbledygook. An ardent and persuasive advocate of rate reform, he once stated the problem in these terms:

"From A, a point in the Southwest, to B, in Central Territory, an 11,000-gallon tank carload of an important commodity pays the railroads that haul it $455. From C—an origin 625 miles further from B than A—the charge is $486. The railroads get $31 more for the longer haul, but they pay $69 extra for tank-car rental. Or, for 625 more miles of transportation, the railroads get nothing **net**—and, in fact, pay $38 for the privilege of hauling the freight the extra 625 miles. I have the uneasy feeling that this may not be the only rate which isn't exactly designed to make profits."

WHO'S A SOCIALIST?—"One thing is certain—and that is that some politicians who enjoy the reputation of conservatism are practicing socialists when it comes to transportation; and some alleged liberals are sound conservatives when pork-barrel appropriations come up. . . . When it comes to Congressional action, transportation does not seem to be a partisan issue—but largely a question of the opinions of individual legislators."

ON REGULATION—"Timken's original business . . . was in making ball-bearing buggies. Studebaker used to concentrate on farm wagons. If Timken and Studebaker were regulated as the railroads have been regulated, they would never have been allowed to branch very far into other lines of products. They would still be largely limited to making horse-drawn buggies and wagons. Which would have cramped their style."

LABOR RELATIONS—"Intra-family feuding is a luxury only the rich can afford. Poor folks, if they're smart, will learn to settle their differences by the frugal methods of peace."

STRAIGHT THINKING—"Talking or writing simply and directly is the best practice there is for straight thinking, and straight thinking is the best help there is to professional advancement."

HARMONY AND CONTROVERSY—"Too much harmony may be a sign of death—nothing is quieter than a graveyard. On the other hand, too much controversy can destroy an association, and frequently has done so."

PASSENGER TRAINS—"I've come pretty near to believing, since railroad reputations are so heavily weighted on the passenger side, that railroads have just about got to make the service attractive or get out of it. It's as if a fellow in the carpentry line were to have his skill judged, not by his workmanship at his trade, but by the cut of his clothes when he dresses up on Sunday. If he isn't decked out like a dude on his day off, the assumption is that he can't drive a nail straight. . . .

"The way it looks to me, there are kinds of passenger service capable of great development profit-wise, just as there are others that are hopeless, and a drag on the whole enterprise. No department store retired from business when people quit buying bedroom crockery—the stores just quit stocking the unwanted goods, and turned instead to pushing the merchandise that people still showed an interest in buying."

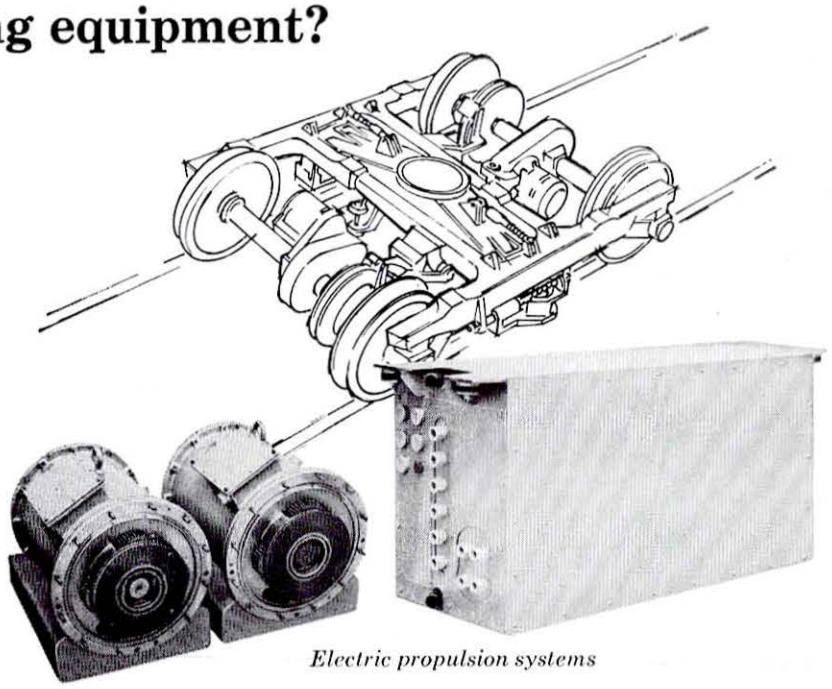
SUBSIDIES—"It bothers me a little to see the suggestion made that railroad commuter lines be subsidized. The way it looks to me—if public money is used to keep a service going that a railroad would be happy to discontinue, then such public expenditure is a subsidy to the commuters or the community, not to the railroad."

ON NATIONALIZATION—"It might be a good thing for both the railroads and their employees if a few railroad employees were to look around Europe (for instance) a little, to see how railroad employees fare under government ownership. I have been to Europe only once, and that was a long time ago, but I've never seen or heard or read anything to suggest that railroad employees fare better over there under socialization than employees do on privately owned railroads in America. Even in this country, it is private industry—not government—which usually leads the way in improving living standards of employees."

CHANGE—"Improvement in the way people live doesn't come by clinging stubbornly to traditional ways of doing things. It doesn't come, either, by carelessly discarding all the time-proven practices, developed by generations of experience. One of the advantages of maturity is its ability to grasp what is useful of the new, while holding resolutely onto that part of the old which is still valid."

BLUES AND BICKERING—"People running a business don't win customers or partisans by singing the blues or bickering. They get them by providing the best service their resources allow, while welcoming cooperation to improve it. The appeal of railroad men to the public is that of professional men to their clients' self-interest—not of mendicants seeking alms."

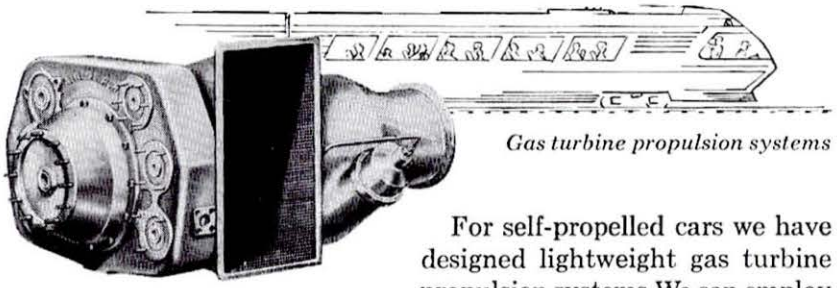
Who can help high-speed rail cars operate more profitably with lightweight, reliable propulsion and air conditioning equipment?



Electric propulsion systems

Garrett-AiResearch for 25 years has built lightweight, reliable, economical systems for both the aircraft and space industries. This experience includes gas turbines, heat transfer equipment, control systems, electromechanical equipment, and environmental control systems for almost all the airplanes and manned spacecraft in the free world today.

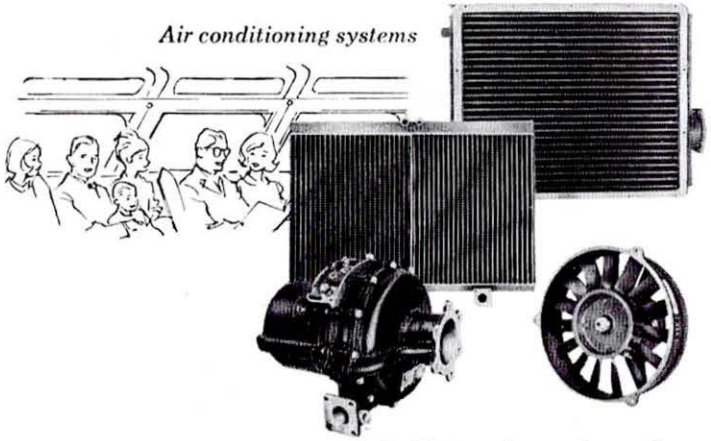
This same know-how can benefit operators and builders of high-speed rail cars. It can save thousands of pounds of weight per car, and tens of thousands of dollars each year in operating costs.



Gas turbine propulsion systems

For self-propelled cars we have designed lightweight gas turbine propulsion systems. We can employ a turbomechanical drive or turbo-electric drive, depending on the application.

Air conditioning systems



For electric propelled cars we can provide AC or DC driven motors powered from static conversion equipment operating from either an AC or DC source.

We can provide lightweight, electrically powered air conditioning systems for all kinds of vehicles. Where a gas turbine is used for propulsion we can utilize exhaust heat for air conditioning.

For more information, write Dept. 1101, The Garrett Corporation, 9851 Sepulveda Blvd., Los Angeles, California 90009.

Garrett *is* reliability

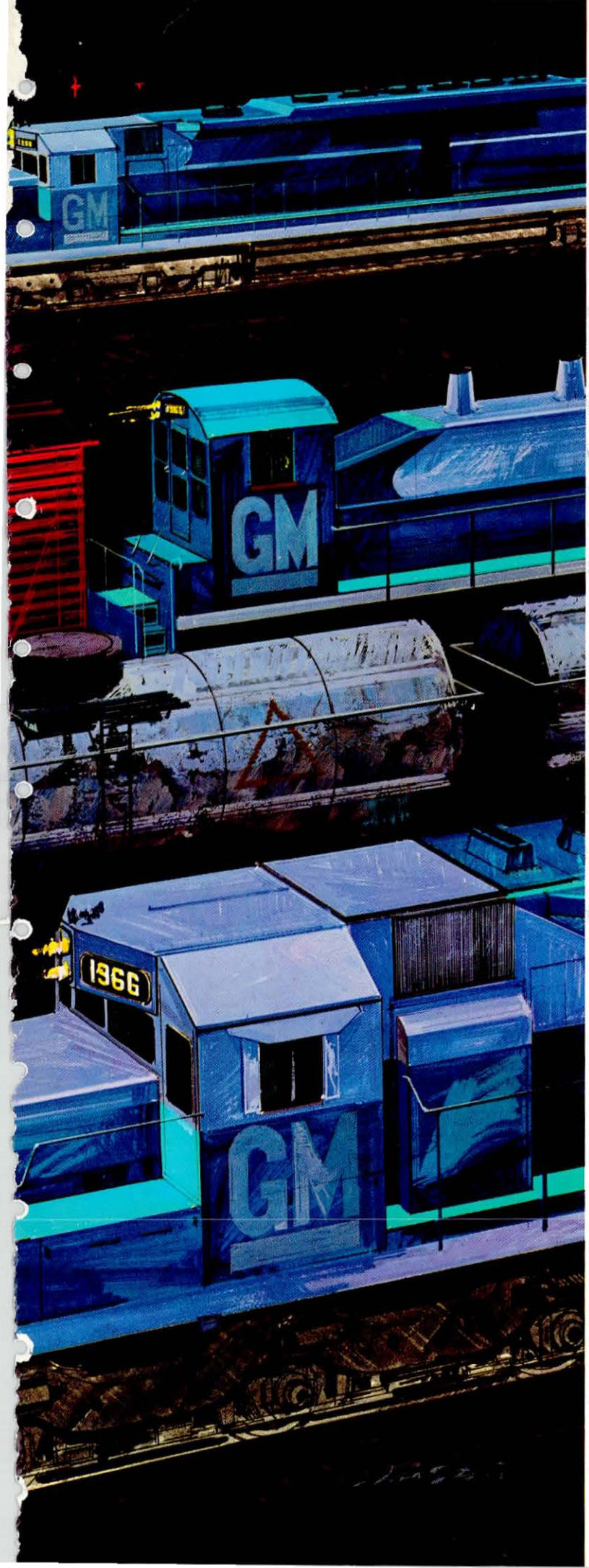
GARRETT

AiResearch Manufacturing Divisions
Los Angeles • Phoenix

Circle 14 on reader service card

Circle 15 on reader service card ►

66
1966



This year, America's railroads will have new tools for profit from General Motors.

A whole new generation of Diesel-electric locomotives are now in production at Electro-Motive Division.

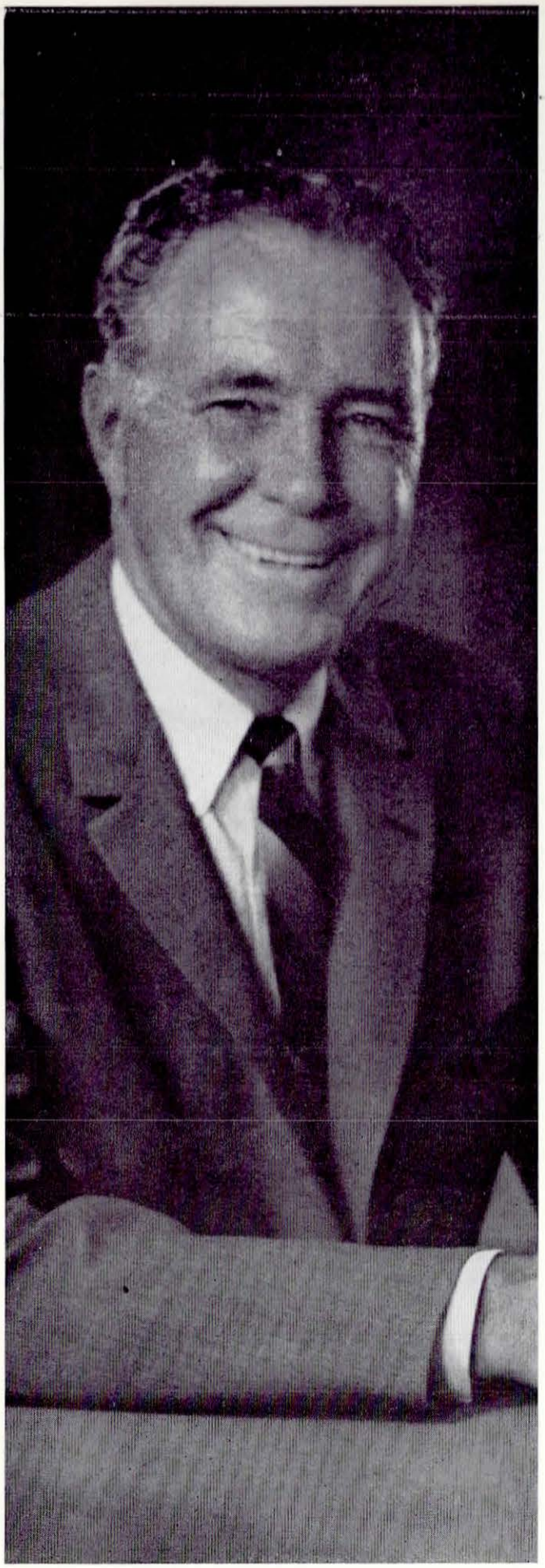
Hundreds of these new models will go to work for America's railroads in the months ahead. And, what a difference they'll make!

The difference will show up on railroad operating reports. Adding new GM power to the fleet will bring maintenance costs down, improve efficiency ratios, and increase ton-miles per unit.

But that's only part of the story. Electro-Motive replacement plan provisions make possible the removal of older, more-costly-to-operate locomotives from service without loss of equity.

Any wonder why we call our new locomotives "tools for profit for America's railroads?"

ELECTRO-MOTIVE DIVISION
GENERAL MOTORS · LA GRANGE, ILLINOIS



THOMAS M. GOODFELLOW
President and General Manager
Long Island Rail Road

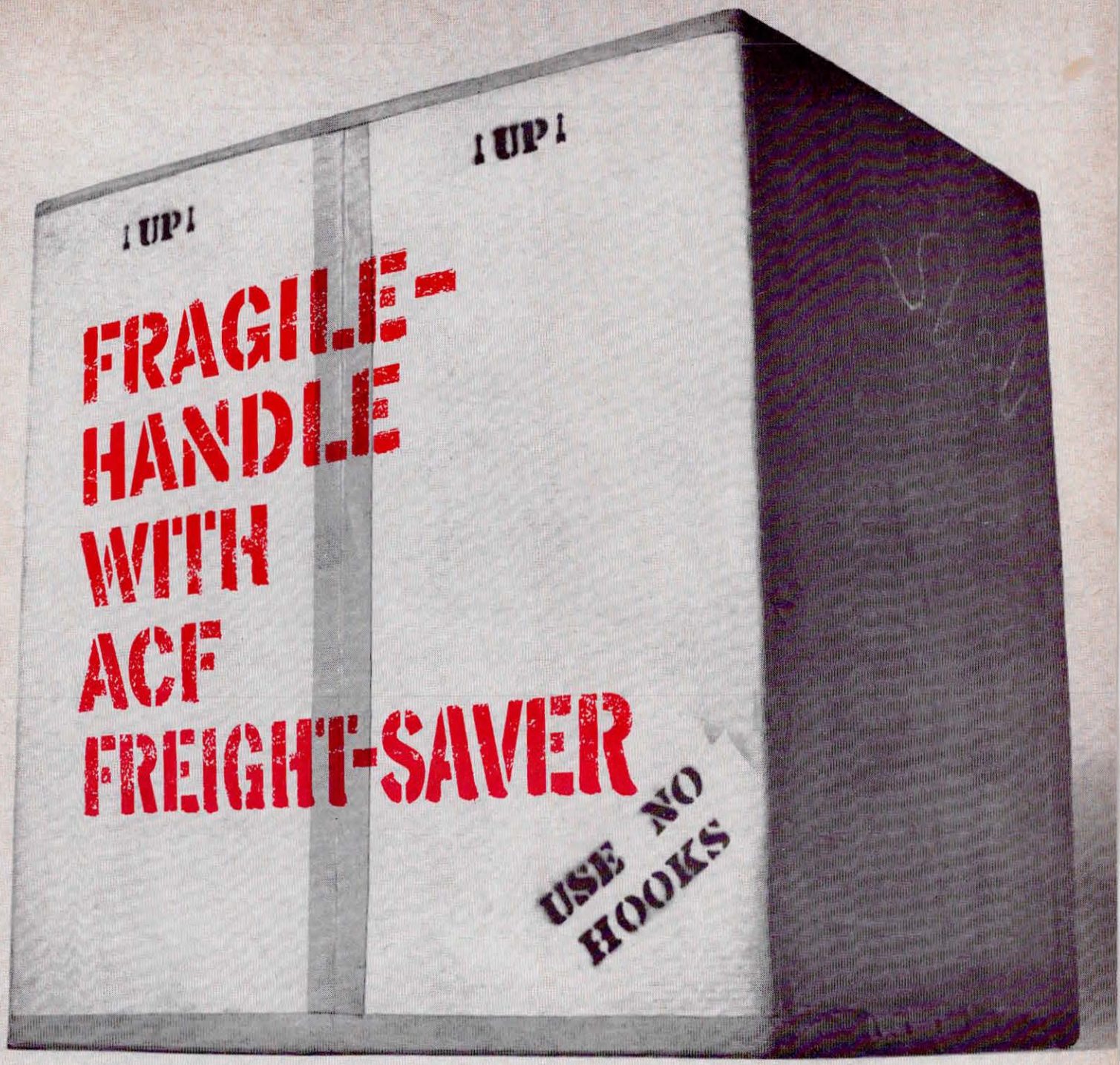
Never before in the history of railroading—and our own Long Island Rail Road has been part of this history for almost 132 years—have technological changes come so thick and fast as they're coming today.

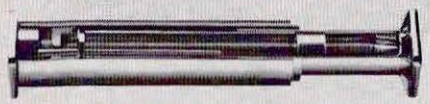
Keeping up with these changes, which may produce a veritable revolution in the mass movement of people, can be a big job in itself. But Railway Age helps cut the job down to size by reporting and interpreting them in an authoritative and interesting manner.

We consider it a mighty handy tool to have in our kit.

Thomas M. Goodfellow

Circle 16 on reader service card ▶





From complex machinery to glassware to radios, you can count on better protection for your ladings with ACF Freight-Saver™ hydraulic-pneumatic cushioning units.

Freight-Saver units have no springs, few moving parts. Air pressure is used to soak up shocks and recenter impact after impact. Result? An attested record of rugged, trouble-free performance with very little maintenance. And if friction between the fixed and sliding sill develops, it's simple to adjust the air pressure.

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So if it's fragile, or even if it's not, handle it with Freight-Saver to cut down damage claims. (Thirty-one railroads do, on thousands of freight cars.)

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HANDHOLDS
STANCHIONS
FITTINGS
HANDBRAKES

You can count on it, for rush-hour safety most modern big city rapid transit cars and busses are Ellcon equipped with fittings and handholds of gleaming stainless steel.

ELLCON-NATIONAL INC.

74 TRINITY PLACE, NEW YORK, N.Y. 10006

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Weighing cars on the run

(*Continued from page 29*)

made its first installation in Port Covington Yard, Baltimore, Md., where it is reported time for weighing cars has been reduced by 85% to 95%. The Reading followed with an installation at Reading, Pa., cutting one day from delivery of tidewater coal. Reading's installation also resulted in closing of the manual hump classification at St. Clair Yard, Pottsville, Pa. The line estimated its savings at $675,000 the first year, having weighed 100,000 cars and never having rescheduled a car for weighing due to maintenance. Installations also have been made on the Norfolk & Western, Baltimore & Ohio, Chesapeake & Ohio and the Pacific Great Eastern at Prince George, B. C. A second installation was ordered by the Reading.

One industrial installation has been made. During coming months others are scheduled for Weirton Steel Co. and Continental Can Co.

● **Solid-state model coming.** The Morrisville installation, which is unidirectional, is on level grade. One scale, however, has been installed on an 0.03% grade. IRWC will maintain the scale for one year with a warranty of the same duration. A running track is available, but IRWC places a 15-mph limit on it. IRWC also insists on the same grade as that of the scale for one car length on either side of the scale.

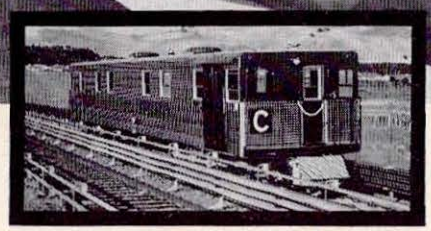
IRWC is now working on a solid-state model and is also prepared to install pitless scales.

The PRR installation was necessitated by the deepening of the Delaware River channel to U.S. Steel's Fairless Works. PRR had previously handled inbound materials, most of which had been weighed at origin, plus some ore. When U.S. Steel decided to transfer its ore unloading from Philadelphia to Fairless, the yearly ore tonnage jumped to 4 million tons. This, with the peak periods involved, would have complicated the over-all operation for the PRR at Morrisville. The PRR, therefore, installed the automated scales just outside U.S. Steel property to weigh all ore before it is classified.

The facility has been functioning for a year, weighing all ore in cuts of 60 cars, as well as some coal and scrap. At the start of the ore operation about 30% of the cars were found to be overweight. This has now dropped to 3 out of 60 cars, using 20,000 pounds as the deciding factor. ■

B.A.R.T. plans super comfort-convenience to convert Californians to rail transit

Full-scale model of final BART car for evaluation of car body and seating design.

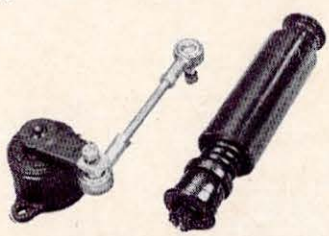


Laboratory car for comparative check of operational and control systems.

HOUDAILLE ride controls serve on test cars

Getting the auto-happy Californian out of his driver's seat is the primary aim of the billion-dollar San Francisco Bay Area Rapid Transit District development project now being constructed to serve BART's planned three-county, 75 mile system. To lure thousands of daily commuters from the area's congested highways, BART intends to provide the most comfortable, fastest, safest and most economical means of interurban transportation the world has ever known. BART laboratory cars are now in operation to test and develop advanced equipment and techniques prior to selection of final design. Manufacturers of four out of five trucks chosen for test car evaluation included Houdaille ride-control devices in their test units, demonstrating Houdaille's leadership in solving railroad vibration damping problems. Houdaille Rotary Hydraulic Shock Absorbers and Friction Snubbers meet all the requirements of vertical and lateral car motion control for maximum passenger comfort.

Rotary Shock Absorbers are externally adjustable for "fine tuning" of ride control performance. Their rugged construction and completely sealed design means they far outlast ordinary shock absorbers . . . require minimum service. Automatic temperature compensation facilitates all-weather operation, and installation is simplified by the many possible variables in mounting and linkage arrangements.



The simple, trouble-free design of Houdaille Friction Snubbers offers extended service life under the most severe operating conditions. For ride control characteristics that match the most exacting standards of modern rapid transit needs, investigate Houdaille. Write for Catalogs RSA-765 and FS-165.

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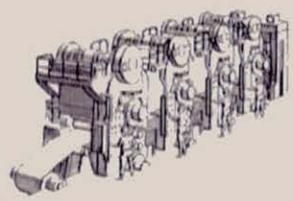
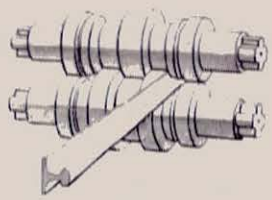
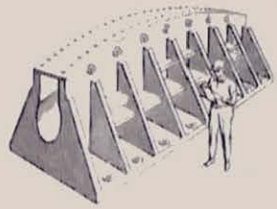
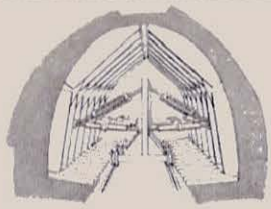
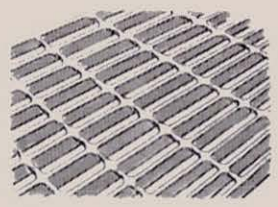
BLAW-KNOX *and Urban Transportation*

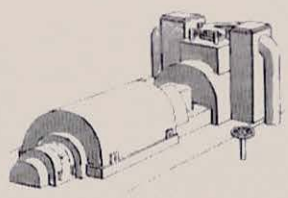


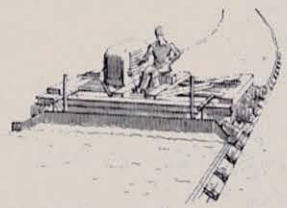












BLAW-KNOX

Circle 19 on reader service card

MARKET OUTLOOK

Carloadings

Loadings of revenue freight in the week ended Jan. 8 totaled 544,556 cars, the Association of American Railroads announced on Jan. 20. This was an increase of 36,274 cars, or 7.1%, compared with the previous week; an increase of 12,189 cars, or 2.3%, compared with the corresponding week last year; and an increase of 45,214 cars, or 9.1%, compared with the equivalent 1964 week. Ton-miles generated by carloadings in the week ended Jan. 8 are estimated at 13.7 billion, an increase of 8.2% above the corresponding week of 1965, and 15.1% above the 1964 week.

REVENUE FREIGHT CARLOADINGS
For the week ended Saturday, Jan. 8

District	1966	1965	1964
Eastern, including Allegheny and Pocahontas ..	216,512	213,725	187,125
Southern	115,862	110,097	98,556
Total Eastern and Southern Districts	332,374	323,827	285,681
Northwestern .	60,482	59,971	62,114
Central Western	112,003	112,426	114,701
Southwestern .	39,697	36,148	36,846
Total Western Districts	212,182	208,545	213,661
Total All Roads	544,556	532,367	499,342
Commodities:			
Grain and Grain products	61,781	50,773	58,445
Livestock	2,021	2,639	2,926
Coal	111,795	103,530	96,419
Coke	8,201	9,071	7,007
Forest Products	39,505	38,143	34,053
Ore	15,668	15,729	12,167
Merchandise l.c.l.	6,682	9,651	13,104
Miscellaneous .	298,903	302,831	275,221
Jan. 15	544,556	532,367	499,342
Jan. 8	508,282	531,058	528,770
Cumulative total, 2 weeks	1,052,838	1,063,425	1,028,112
Estimated revenue ton-miles (billions) 2 weeks	26.4	25.1	24.4

PIGGYBACK CARLOADINGS.—U. S. piggyback loadings for the week ended Jan. 8 totaled 18,179 cars, which carried 29,577 trailers, compared with 16,346 cars, carrying 26,605 trailers, in the corresponding 1965 week.

IN CANADA—Carloadings for the 10-day period ended Dec. 31 totaled 93,595 cars, compared with 76,634 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada		
Dec. 31, 1965	93,595	32,043
Dec. 31, 1964	87,774	28,320
Cumulative Totals		
Dec. 31, 1965	3,980,793	1,250,916
Dec. 31, 1964	3,929,121	1,201,643

FREIGHT-TRAIN CARS

► *Canadian National.*—Ordered 400 100-ton cylindrical type steel hoppers and 150 70-ton general service flat cars at a cost of $8.5 million. The hoppers will be built by Marine Industries Ltd., with delivery beginning in September. International Equipment Co. Ltd., will build the flat cars, and delivery of these will begin in May.

► *Grand Trunk Western.*—Ordered 103 70-ton, 86½-ft box cars from Thrall Car. Deliveries are expected to begin in September and continue at a rate of 25 cars per week.

PIGGYBACK

► *Atlantic Coast Line.*—Will acquire 1,000 new ventilated trailers for transporting watermelons by piggyback from Florida, Georgia, Alabama and South Carolina to northern and midwestern markets. The trailers, to be received by April 1, will be leased from REALCO Leasing Corp. of Chicago. Palmer Bayer, vice president and general manager of REALCO, says this is believed to be the largest order for trailers ever placed at one time.

► *Pacific Fruit Express.*—Will acquire an additional 38 8x8½x24-ft insulated containers for ship-rail service between Hawaii and points in the continental United States. PFE previously acquired 12 of the units for experimental operation in conjunction with Matson Navigation Co.

NEW FACILITIES

► *Canadian National.*—Ordered equipment to add a new code location on an existing Edmonton TCC installation for control of a siding switch at Jasper, from WABCO's Union Switch & Signal Division.

► *Chicago & North Western.*—Operating and fixed-property improvements in 1966 will include installation of two-way radio equipment in more than 620 locomotives, 430 cabooses and 166 base stations; installation of additional hot-box detectors; expenditure of about $1 million for mechanized M/W equipment.

► *Lehigh Valley.*—Ordered control and signaling equipment from General Railway Signal for installation at Sayre, Pa.

► *Reading.*—Ordered from Union Switch & Signal division of WABCO seven radio sets for base station usage, 104 mobile radio units and one portable radio set.

► *Union Pacific.*—Roadway improvement program for 1966 will include installation of 56,780 net tons of new rail and 500,000 cross ties and reballasting of 900 miles of track. UP also plans to acquire additional maintenance-of-way equipment at a cost of $3 million (compared to a $1-million outlay for M/W equipment in 1965). Communications projects will include completion of main-line microwave between Pocatello, Ida., and Hinkle, Ore.; installation of microwave between Omaha and Kansas City and between Cheyenne and Denver; installation of about 60 dual base radio stations at microwave repeater locations; installation of radio equipment on various branch lines to permit retirement of wire line communications; and installation of an intercom and paging system at Salt Lake City yard.

YOU OUGHT TO KNOW

Saunders supports LBJ proposal: "Transportation problems are so formidable and so complex that they require the concentrated attention of an executive agency with Cabinet authority and prestige," Pennsylvania Chairman Stuart P. Saunders told the Economic Club of New York on Jan. 19. Creation of such a department, Saunders said, "deserves a high priority among the many projects the President laid out in his message to Congress." He suggested that all segments of the transportation industry should work together for passage of necessary legislation and that "railroads especially should support the President's proposal."

Boyd clarifies: One question raised by President Johnson's proposal for a Transportation Department was answered last week by Alan S. Boyd, the undersecretary of commerce for transportation. The proposal, said Boyd, "does not contemplate any change in the economic regulatory processes of the federal government. These responsibilities would remain where they now are—in the hands of independent agencies created by Congress."

CN all the way: Only one railway—Canadian National—will furnish passenger train service between Montreal and Toronto and between Ottawa and Toronto, under terms of an agreement reached by CN and Canadian Pacific and announced Jan. 14 by the Board of Transport Commissioners. Until last fall, the two railroads had a pool arrangement between Montreal and Toronto. On the Toronto-Ottawa run, CN will operate over CP trackage between Smiths Falls and Brockville.

Fruehauf sells Strick: Fruehauf Corp., ordered last year to divest itself of its Strick Division, has now sold the division to the newly formed Strick Trailer Corp. for $3 million. The new corporation was formed by a group of Strick executives headed by Sol Katz, Strick president, and supported by the Prudential Insurance Company of America and other financial institutions.

Consultant for short lines: The American Short Line Railroad Association has announced the appointment of Mason King, formerly a vice president of the Southern, as consultant to the association. He will study traffic problems of short lines in the Eastern Region. Similar studies may be made later for other regions.

Box-car shortage: Despite rising expenditures by railroads for new equipment, the shortage of plain box cars continues to present "grave problems" to shippers west of the Mississippi, says ICC Chairman John Bush. "Even though the railroads ordered $1,150,000,000 worth of cars last year, there are about 150,000 fewer plain box cars today than there were 15 years ago and the trend is continuing downward," Bush told the National Transportation Institute in New York. He said per-diem legislation now under consideration would be a big step toward alleviating the problem. "Another major step forward would be to develop means of better control over car movements. Since freight cars are moving only about 10% of the time, an improvement of 1% would be the equivalent of 15,000 additional cars."

Stock split approved: Shareholders representing more than 89% of Chicago & Eastern Illinois' 634,-143 outstanding shares have approved a two-for-one split, which will become effective in about 30 days. At the same time, authorized shares were increased from 1.5 million to 3 million. And C&EI President David O. Mathews, addressing a special meeting of stockholders, also had good news on his road's operations: C&EI in 1965 hit an all-time high in revenues; and net income will be up to more than $2,077,-000 or $3.27 per share before funds, compared with $1,272,641 or $2.48 per share in '64.

Truck tonnage: Intercity truck tonnage in the week ended Jan. 8 was 21.6% above that of the previous week, and 0.8% ahead of the volume in the corresponding week of 1965, according to American Trucking Associations.

Current statistics

Net Income	
9 mos., 1965	$540,000,000
9 mos., 1964	500,000,000
Carloadings, revenue freight	
2 wks., 1966	1,052,838
2 wks., 1965	1,063,425
Freight cars on order	
Dec. 1, 1965	42,485
Dec. 1, 1964	29,812
Freight cars delivered	
11 mos., 1965	72,919
11 mos., 1964	62,471
Serviceable cars	
Dec. 1, 1965	1,404,835
Dec. 1, 1964	1,403,939

James G. Lyne (*Continued from page 34*)

can Economic Association, the Economic History Association, the American Society of Traffic and Transportation, the Trade Center Club of New York, the Chicago Club, the National Press Club, and Phi Beta Kappa. He was an Episcopalian and a Mason, and listed himself as a political independent.

An editor, first

Jim Lyne wore many hats, but it was as an editor that he would want to be remembered.

He once wrote of the late Robert R. Young: "He was like the fellow who trained mules by gentle precept, but occasionally found it expedient to hit them over the head with a two-by-four to get their attention." Jim Lyne never hit an adversary over the head with a two-by-four; but when gentle precept failed, he had other weapons. Laughter—with a bite—was one of them. "If you can't beat 'em," he once said, "you can always try to laugh 'em to death."

It was in this spirit that he wrote such lines as, "Where a city lets highway planners dominate its development, it is like picking a doctor who's in the undertaking business on the side." In similar vein he took out after the advocates of "cheap" waterway transportation. "I hear," he wrote, "that rich old Uncle Sam is spending $38 million of our money to add one mile to the navigability of the Mississippi in the Minneapolis area. The purpose, I'm told, is solely to permit barge delivery of coal to a privately owned electric plant. There must be some mistake here. From all I read in the papers about the electric power industry—speeches by executives and advertising the industry does—they are all dead set against anything savoring of socialism."

Jim Lyne was a peacemaker by nature, but he never ran away from a fight; he occasionally even picked one, when the cause was sufficient. It was under his editorship that Railway Age published, in 1957, its OUTRAGE issue, a well-documented report on the precarious position the railroads then found themselves in, largely due to abuses in the regulatory and policy field. That report, reprinted more than 300,000 times, was credited with helping shape the Transportation Act of 1958. The following year, Jim Lyne was the architect of Railway Age's TRAP issue, which exposed work-rule skeletons that had long rattled in railroad closets; this report led to the railroad industry's successful fight for work-rules reform.

In 1955, Jim Lyne had written: "How can anybody be unreservedly optimistic about the future of an industry, no matter how vigorous, which is subjected to the limitless burdens which are heaped upon the railroads? It's like a healthy child condemned to live in a slum neighborhood. Or like a long-distance runner, loaded down with enough baggage to slow him down to a crawl. He could be an Olympic athlete and still find it hard to win."

Jim Lyne lived to see the railroads not only back in the race, but winning it. He died with the satisfaction of knowing he had helped, in no small way, to make this possible. ■

CTA Car designed and built by Pullman-Standard, a Division of Pullman Incorporated.

CTA and PATH Chose TRANSIT-FLOR RUBBER FLOORING

PATH Car designed and built by General Steel Industries, Inc., St. Louis Car Division.

When safety, decor and long wear with low maintenance are the primary concern, Transit-Flor and Transit-Treads are first by far. Every form of public transportation has relied on these highest quality floor and step coverings for more than 30 years. This vast experience as a pioneer and industry leader assures you finest quality and performance.

SAFER, SURER FOOTING Durable, hard-wearing rubber compound combines masticated fibers for maximum wear and grip. The natural resiliency of rubber increases underfoot comfort, absorbs shock and prolongs wear.

ENGINEERED FOR LONGER WEAR Smooth surface rubber Transit-Flor is produced in 1/8, 3/16 and 5/16-gauges; ribbed in 3/16 and 5/16. Custom designed threshold plates feature a 22-gauge steel reinforcing sheet, sealed in rubber to prevent rust and corrosion. The plates come in 3/16 and 5/16-gauges.

CUSTOM-PRODUCED FOR YOUR DESIGN Transit-Flor and Transit-Treads come in a variety of marbleized and terrazzo patterns to put new eye appeal into existing cars, or blend with the most modern decor in today's original equipment. Flooring can be custom-cut any size up to 38 inches wide and 25 yards long, or supplied in 9 x 9" tiles.

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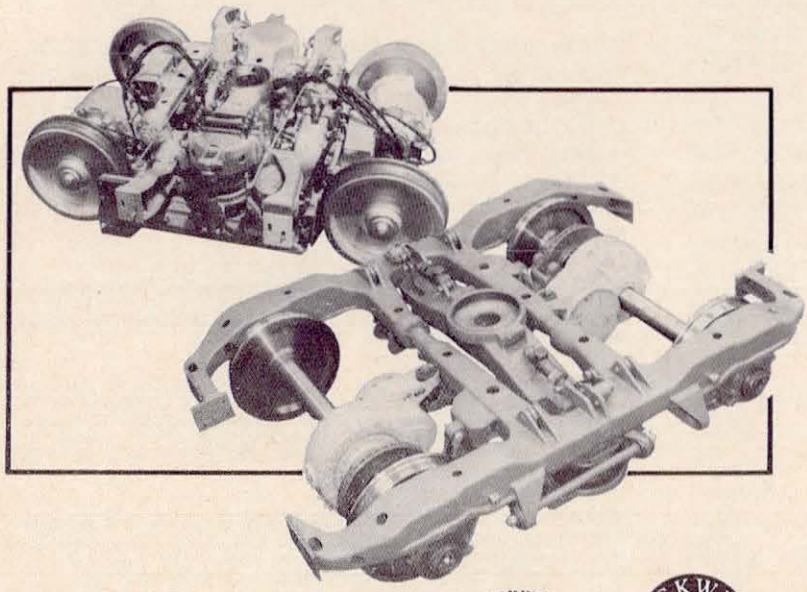

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Circle 21 on reader service card

Freight and Passenger Car Charts

These charts are very helpful to AAR billing clerks, mechanical engineers, purchasing and stores personnel, car inspectors, write-up men, car foremen, and anyone else who needs a knowledge of car parts and their relation to each other.

The charts include a cutaway diagram of the car and a listing of important parts with arrows showing where the part is located. These charts are a part of standard training programs used on a number of major railroads.

$2 each
$10 for any six

If you are not satisfied

YOUR MONEY WILL BE REFUNDED

if you return the charts to us within 30 days

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1809 CAPITOL AVENUE
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Please send the charts I have checked below. If I am not satisfied I will return the charts within 30 days for a full refund. I enclose a check or money order for $2.00 for each chart or $10.00 for any six charts.

- ☐ Streamlined light weight passenger car (16x25 inches)
- ☐ Covered hopper car (20x30 inches)
- ☐ Box car, AAR standard 40 ft. (23x25 inches)
- ☐ Air conditioned chair car, 1930 design (18x35 inches)
- ☐ Tank Car (22x35 inches)
- ☐ Refrigerator Car, wood sheathed, steel underframe, 1920 design (14x20 inches)

RA-1/24

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Wanted: One EMD SW 600 switcher locomotive, 100 ton with 567 B, BC, or C engine. Must be in good condition.
One GE 45-ton diesel electric locomotive with Cummins or Caterpillar engines.
Advise price, location, and specifications to Box 163, Railway Age, 14 East Jackson Boulevard, Chicago, Ill. 60604.

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THE ACTION PAGE

James G. Lyne, 1898-1966

This was his page

We are nourished by the great ideas. And we in turn nourish them.

In this exchange, Jim Lyne gave as good as he got.

• • •

The idea of clarity

"Mergers are not for shrinkage, any more than the purpose of trimming a fruit tree is to reduce the yield of fruit. The purpose of mergers is to provide improved service at more attractive prices—hence to turn the trend of traffic steadily upward. The long-run purpose is not to reduce railroad job opportunities, and purchases from manufacturers, but to assure their increase."

The idea of fairness

"Railroading is a business, not some sort of social service, like police and fire protection. If, in the course of their business, railroads are required to perform some social service—such as the utilities do when they light the streets—then they have a right to demand commercial compensation, without being obliged to label themselves as mendicants."

The idea of honesty

"I would be classed, probably, as a 'conservative' in my political and economic beliefs. That is. I am not inclined to favor governmental provision of services that could just as well (or better) be provided by private enterprise. I see no reason why long-haul highways and inland waterways should not be sold out to private corporations, to be operated as regulated public utilities. Or, for that matter, why shouldn't the post office be a public utility—just like the phone or the telegraph business? In any event, it seems to me that the burden of proof ought to be on those who want the government to provide economic services."

• • •

Walt Whitman in "So Long" said: "...this is no book, who touches this touches a man." The same could be said of the body of Jim's writings in Railway Age.

What was Jim like? His appearance was perhaps deceiving. A man on the Rolls-Royce side, you might say. Quiet, solid, dignified—unpretentious but impressive.

Inside, he was more Ferrari.

All of us run on different tracks. Jim's was economics. It took a very fast man to keep him in sight as he whizzed through a book, a report, a table of figures. He was a man in a hurry to light up his corner of the dismal science, and light it up he did.

"Those that can do, those that can't teach," said Bernard Shaw. If this is a rule, Jim was one of those who proved it by breaking it. It was enormously impressive to his staff that for several years Jim could spend his editorial mornings as a teacher of, say, railroad economics, and his afternoons as a doer—as Director of the Commercial Research Department of the Traffic Executive Association, Eastern Railroads—which of course made a significant contribution to the development of incentive rates.

The stage, that Fabulous Invalid, can in fact hardly hold a candle to the railroads in their long years of ailing, when they were beset by every ill and complication known to business.

Jim was a rare one in the depth of his faith that the logic of the railroads and the devotion of railroaders would win through. And in the personal effort he made to help see that they did.

Some nut all caught up with railroading, was no doubt the judgment of some.

Jim was no nut. Like Dorothy in the "Oz" books, Jim was from Kansas, the very center of the geography of keeping your feet on the ground.

Speaking of the center as the heart of a matter rather than a compromise position, the center was Jim's special place. Jim had a great talent for going to the middle of a storm and there, in its quiet center, seeing the storm better than others being blown around.

It is fashionable to dedicate books, but not magazines, to people. All of us who worked with Jim—on what will always be for us Jim's magazine—would like it if in some secret type, visible only to us, each issue to come were to read: "Dedicated to Jim Lyne."

—The Editors

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